## Portfolio Margin

Under SEC-approved Portfolio Margin rules and using our real-time margin system, our customers are able in certain cases to increase their leverage beyond Reg T margin requirements. For decades margin requirements for securities (stocks, options and single stock futures) accounts have been calculated under a Reg T rules-based policy. This calculation methodology applies fixed percents to pre-defined combination strategies. With Portfolio Margin, margin requirements are determined using a "risk-based" pricing model that calculates the largest potential loss of all positions in a product class or group across a range of underlying prices and volatilities. This model, known as the Theoretical Intermarket Margining System ("TIMS"), is applied each night to U.S. stocks, OCC stock and index options and U.S. single stock futures positions by the federally-chartered Options Clearing Corporation ("OCC") and is disseminated by the OCC to participating brokerage firms each night. The minimum margin requirement in a Portfolio Margin account is static during the day because the OCC only disseminates the TIMS parameter requirements once per day.

However, Portfolio Margin compliance is updated by us throughout the day based on the real-time price of the equity positions in the Portfolio Margin account. Please note, at this time, Portfolio Margin is not available for U.S. commodities futures and futures options, U.S. bonds, Mutual Funds, or Forex positions, but U.S. regulatory bodies may consider inclusion of these products at a future date.

Portfolio or risk based margin has been utilized for many years in both commodities and many non-U.S. securities markets, with great success. Dependent upon the composition of the trading account, Portfolio Margin may require a lower margin than that required under Reg T rules, which translates to greater leverage. Trading with greater leverage involves greater risk of loss. There is also the possibility that, given a specific portfolio composed of positions considered as having higher risk, the requirement under Portfolio Margin may be higher than the requirement under Reg T. Part of the reasoning behind the creation of Portfolio Margin is that the margin requirements would more accurately reflect the actual risk of the positions in an account. Thus, it is possible that, in a highly concentrated account, a Portfolio Margin approach may result in higher margin requirements than under Reg T. One of the main goals of Portfolio Margin is to reflect the lower risk inherent in a balanced portfolio of hedged positions. Conversely, Portfolio Margin must assess proportionately larger margin for accounts with positions which represent a concentration in a relatively small number of stocks.

## Portfolio Margin Eligibility

Customers must meet the following eligibility requirements to open a Portfolio Margin account:

- An existing account must have at least USD 110,000 (or USD equivalent) in Net Liquidation Value to be eligible to upgrade to a Portfolio Margin account (in addition to being approved for uncovered option trading). Existing customers may apply for a Portfolio Margin account on the Account Type page in Account Management at any time and your account will be upgraded upon approval. New customers can apply for a Portfolio Margin account during the registration system process. It should be noted that if your account drops below USD 100,000 you will be restricted from doing any margin-increasing trades. Therefore if you do not intend to maintain at least USD 100,000 in your account, you should not apply for a Portfolio Margin account.
- New customer accounts requesting Portfolio Margin may take up to 2 business days (under normal business circumstances) to have this capability assigned after initial account approval.

It should be noted that if your account is subsequently funded with less than USD 100,000 in Net Liquidation Value (or USD equivalent), you will be restricted from doing any margin-increasing trades until the Net Liquidation Value exceeds USD 100,000. Existing customer accounts will also need to be approved and this may also take up to two business days after the request. Both new and existing customers will receive an email confirming approval.

- Those institutions who wish to execute some trades away from us and use us as a prime broker will be required to maintain at least USD 1,000,000 (or USD equivalent).
- Customers in Canada are not eligible for Portfolio Margin accounts due to IDA restrictions. In addition, all Canadian stock, stock options, index options, European stock, and Asian stock positions will be calculated under standard rules-based margin rules so Portfolio Margin will not be available for these products.
- Non-U.S. Omnibus Broker (Long Position/Short Position) accounts are not eligible for Portfolio Margin accounts.
- Accounts reporting equity below the \$100,000 minimum will be subject to a margin surcharge, the effect of which will be to gradually transition the account to margin levels approximating those of the Reg. T methodology as equity continues to decline.

## Portfolio Margin Mechanics

Under Portfolio Margin, trading accounts are broken into three component groups: *Class* groups, which are all positions with the same underlying; *Product* groups, which are closely related classes; and *Portfolio* groups, which are closely related products. Examples of classes would include IBM, SPX, and OEX. A product example would be a Broad Based Index composed of SPX, OEX, etc. A portfolio could include such products as Broad Based Indices, Growth Indices, Small Cap Indices, and FINRA Indices.

The portfolio margin calculation begins at the lowest level, the class. All positions with the same class are grouped and stressed (underlying price and implied volatility are changed) together with the following parameters:

- A standardized stress of the underlying.
  - For stock, equity options, narrow based indices and single stock futures, the stress parameter is plus or minus 15%, with eight other points within that range.
  - For U.S. market small caps and FINRA market indices the stress parameter is plus 10%, minus 10% as well as eight other points in-between.
  - o For Broad Based Indices and Growth indices the stress parameter is plus 6%, minus 8% as well as eight other points in-between.
- A market-based stress of the underlying. A five standard deviation historical move is computed for each class. This five standard deviation move is based on 30 days of high, low, open, and close data from Bloomberg excluding holidays and weekends. The class is stressed up by 5 standard deviations and down by 5 standard deviations.
- An implied volatility stress for options. Implied volatility for each options class is increased by 15% and decreased by 15%.

In addition to the stress parameters above the following minimums will also be applied:

• Classes with large single concentrations will have a margin requirement of 30% applied to the concentrated position.

- A \$0.375 multiplied by the index per contract minimum is computed.
- The same special margin requirements for OTCBB, Pink Sheet and low cap stocks that apply under Reg T, will still apply under Portfolio Margin.
- Initial margin will be 110% of Maintenance Margin.

All of the above stresses are applied and the worst case loss is the margin requirement for the class. Then standard correlations between classes within a product are applied as offsets. As an example, within the Broad Based Index product 90% offset is allowed between SPX and OEX. Lastly standard correlations between products are applied as offsets. An example would be a 50% offset between Broad Based Indices and Small Cap Indices. For stocks and Single Stock Futures offsets are only allowed within a class and not between products and portfolios. After all the offsets are taken into account all the worst case losses are combined and this number is the margin requirement for the account. For a complete list of products and offsets, see the *Appendix-Product Groups and Stress Parameters* section at the end of this document.

Our real-time, intra-day margining system enables us to apply the Day Trading Margin Rules to Portfolio Margin accounts based on real-time equity, so Pattern Day Trading Accounts will always be able to trade based on their full, real-time buying power.

Because of the complexity of Portfolio Margin calculations it would be extremely difficult to calculate margin requirements manually. We encourage those interested in Portfolio Margin to use our <a href="CCG">CCG</a> <a href="Trader Portfolio Margin Demo">Trader Portfolio Margin Demo</a> to understand the impact of Portfolio Margin requirement under different scenarios.

<u>Click here</u> for the OCC's published list of Product Groups and Offset Parameters.

## **Disclosures**

Initial margin will be 110% of Maintenance Margin.