for clearing purposes that are smaller than the product units in which trades submitted for clearing were executed.

(6) A derivatives clearing organization that clears swaps shall have rules providing that, upon acceptance of a swap by the derivatives clearing organization for clearing:

(i) The original swap is extinguished;
(ii) The original swap is replaced by an equal and opposite swap between the derivatives clearing organization and each clearing member acting as principal for a house trade or acting as agent for a customer trade;
(iii) All terms of a cleared swap must conform to product specifications established under derivatives clearing organization rules; and
(iv) If a swap is cleared by a clearing member on behalf of a customer, all terms of the swap, as carried in the customer account on the books of the clearing member, must conform to the terms of the cleared swap established under the derivatives clearing organization’s rules.

(7) [Reserved]

(8) Confirmation. A derivatives clearing organization shall provide each clearing member carrying a cleared swap with a definitive written record of the terms of the transaction which shall legally supersede any previous agreement and serve as a confirmation of the swap. The confirmation of all terms of the transaction shall take place at the same time as the swap is accepted for clearing.

§ 39.13 Risk management.

(a) General. A derivatives clearing organization shall ensure that it possesses the ability to manage the risks associated with discharging the responsibilities of the derivatives clearing organization through the use of appropriate tools and procedures.

(b) Documentation requirement. A derivatives clearing organization shall establish and maintain written policies, procedures, and controls, approved by its board of directors, which establish an appropriate risk management framework that, at a minimum, clearly identifies and documents the range of risks to which the derivatives clearing organization is exposed, addresses the monitoring and management of the entirety of those risks, and provides a mechanism for internal audit. The risk management framework shall be regularly reviewed and updated as necessary.

(c) Chief risk officer. A derivatives clearing organization shall have a chief risk officer who shall be responsible for implementing the risk management framework, including the procedures, policies and controls described in paragraph (b) of this section, and for making appropriate recommendations to the derivatives clearing organization’s risk management committee, board of directors, as applicable, regarding the derivatives clearing organization’s risk management functions.

(d) [Reserved]

(e) Measurement of credit exposure. A derivatives clearing organization shall:

(1) Measure its credit exposure to each clearing member and mark to market such clearing member’s open house and customer positions at least once each business day; and

(2) Monitor its credit exposure to each clearing member periodically during each business day.

(f) Limitation of exposure to potential losses from defaults. A derivatives clearing organization, through margin requirements and other risk control mechanisms, shall limit its exposure to potential losses from defaults by its clearing members to ensure that:

(1) The operations of the derivatives clearing organization would not be disrupted; and

(2) Non-defaulting clearing members would not be exposed to losses that non-defaulting clearing members cannot anticipate or control.

(g) Margin requirements—(1) General. Each model and parameter used in setting initial margin requirements shall be risk-based and reviewed on a regular basis.

(2) Methodology and coverage. (i) A derivatives clearing organization shall establish initial margin requirements that are commensurate with the risks of each product and portfolio, including any unusual characteristics of, or risks associated with, particular products or portfolios, including but not limited to jump-to-default risk or similar jump risk.
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(i) A derivatives clearing organization shall use models that generate initial margin requirements sufficient to cover the derivatives clearing organization's potential future exposures to clearing members based on price movements in the interval between the last collection of variation margin and the time within which the derivatives clearing organization estimates that it would be able to liquidate a defaulting clearing member's positions (liquidation time); provided, however, that a derivatives clearing organization shall use:

(A) A minimum liquidation time that is one day for futures and options;
(B) A minimum liquidation time that is one day for swaps on agricultural commodities, energy commodities, and metals;
(C) A minimum liquidation time that is five days for all other swaps; or
(D) Such longer liquidation time as is appropriate based on the specific characteristics of a particular product or portfolio; provided further that the Commission, by order, may establish shorter or longer liquidation times for particular products or portfolios.

(ii) The actual coverage of the initial margin requirements produced by such models, along with projected measures of the models' performance, shall meet an established confidence level of at least 99 percent, based on data from an appropriate historic time period, for:

(A) Each product for which the derivatives clearing organization uses a product-based margin methodology;
(B) Each spread within or between products for which there is a defined spread margin rate;
(C) Each account held by a clearing member at the derivatives clearing organization, by house origin and by each customer origin; and
(D) Each swap portfolio, including any portfolio containing futures and/or options and held in a commingled account pursuant to §39.15(b)(2) of this part, by beneficial owner.

(iii) A derivatives clearing organization shall determine the appropriate historic time period based on the characteristics, including volatility patterns, of each product, spread, account, or portfolio.

(3) Independent validation. A derivatives clearing organization's systems for generating initial margin requirements, including its theoretical models, must be reviewed and validated by a qualified and independent party, on a regular basis. Such qualified and independent parties may be independent contractors or employees of the derivatives clearing organization, but shall not be persons responsible for development or operation of the systems and models being tested.

(4) Spread and portfolio margins. (i) A derivatives clearing organization may allow reductions in initial margin requirements for related positions if the price risks with respect to such positions are significantly and reliably correlated. The price risks of different positions will only be considered to be reliably correlated if there is a theoretical basis for the correlation in addition to an exhibited statistical correlation. That theoretical basis may include, but is not limited to, the following:

(A) The products on which the positions are based are complements of, or substitutes for, each other;
(B) One product is a significant input into the other product(s); or
(C) The products share a significant common input; or
(D) The prices of the products are influenced by common external factors.

(ii) A derivatives clearing organization shall regularly review its margin reductions and the correlations on which they are based.

(5) Price data. A derivatives clearing organization shall have a reliable source of timely price data in order to measure the derivatives clearing organization's credit exposure accurately. A derivatives clearing organization shall also have written procedures and sound valuation models for addressing circumstances where pricing data is not readily available or reliable.

(6) Daily review. On a daily basis, a derivatives clearing organization shall conduct back tests, as defined in §39.2 of this part, using an appropriate time period but not less than the previous 30 days, as follows:
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(i) On a daily basis, a derivatives clearing organization shall conduct back tests with respect to products or swap portfolios that are experiencing significant market volatility, to test the adequacy of its initial margin requirements, as follows:

(A) For that product if the derivatives clearing organization uses a product-based margin methodology;

(B) For each spread involving that product if there is a defined spread margin rate;

(C) For each account held by a clearing member at the derivatives clearing organization that contains a significant position in that product, by house origin and by each customer origin; and

(D) For each such swap portfolio, including any portfolio containing futures and/or options and held in a commingled account pursuant to §39.15(b)(2) of this part, by beneficial owner.

(ii) On at least a monthly basis, a derivatives clearing organization shall conduct back tests to test the adequacy of its initial margin requirements, as follows:

(A) For each product for which the derivatives clearing organization uses a product-based margin methodology;

(B) For each spread for which there is a defined spread margin rate;

(C) For each account held by a clearing member at the derivatives clearing organization, by house origin and by each customer origin; and

(D) For each swap portfolio, including any portfolio containing futures and/or options and held in a commingled account pursuant to §39.15(b)(2) of this part, by beneficial owner.

(8) **Customer margin.**

(i) **Gross margin.**

A derivatives clearing organization shall collect initial margin on a gross basis for each clearing member’s customer account(s) equal to the sum of the initial margin amounts that would be required by the derivatives clearing organization for each individual customer within that account if each individual customer were a clearing member.

(ii) **Customer initial margin requirements.**

A derivatives clearing organization shall require its clearing members to collect customer initial margin, as defined in §1.3 of this chapter, from their customers, for non-hedge positions, at a level that is greater than 100 percent of the derivatives clearing organization’s initial margin requirements with respect to each product and swap portfolio. The derivatives clearing organization shall have reasonable discretion in determining the percentage by which customer initial margins must exceed the derivatives clearing organization’s initial margin requirements with respect to particular products or swap portfolios. The Commission may review such percentage levels and require different percentage levels if the Commission deems the levels insufficient to protect the financial integrity of the clearing members or the derivatives clearing organization.

(iii) **Withdrawal of customer initial margin.**

A derivatives clearing organization shall require its clearing members to ensure that their customers do with other Commission regulations, a derivatives clearing organization may require its clearing members to report the gross positions of each individual customer to the derivatives clearing organization, or it may permit each clearing member to report the sum of the gross positions of its customers to the derivatives clearing organization.

(C) For purposes of this paragraph (g)(8), a derivatives clearing organization may rely, and may permit its clearing members to rely, upon the sum of the gross positions reported to the clearing members by each domestic or foreign omnibus account that they carry, without obtaining information identifying the positions of each individual customer underlying such omnibus accounts.

(D) A derivatives clearing organization may not, and may not permit its clearing members to, net positions of different customers against one another.

(E) A derivatives clearing organization may collect initial margin for its clearing members’ house accounts on a net basis.
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not withdraw funds from their accounts with such clearing members unless the net liquidating value plus the margin deposits remaining in a customer’s account after such withdrawal are sufficient to meet the customer initial margin requirements with respect to all products and swap portfolios held in such customer’s account which are cleared by the derivatives clearing organization.

(9) Time deadlines. A derivatives clearing organization shall establish and enforce time deadlines for initial and variation margin payments to the derivatives clearing organization by its clearing members.

(10) Types of assets. A derivatives clearing organization shall limit the assets it accepts as initial margin to those that have minimal credit, market, and liquidity risks. A derivatives clearing organization may take into account the specific risk-reducing properties that particular assets have in a particular portfolio. A derivatives clearing organization may accept letters of credit as initial margin to futures and options on futures but shall not accept letters of credit as initial margin for swaps.

(11) Valuation. A derivatives clearing organization shall use prudent valuation practices to value assets posted as initial margin on a daily basis.

(12) Haircuts. A derivatives clearing organization shall apply appropriate reductions in value to reflect credit, market, and liquidity risks (haircuts), to the assets that it accepts in satisfaction of initial margin obligations, taking into consideration stressed market conditions, and shall evaluate the appropriateness of such haircuts on at least a quarterly basis.

(13) Concentration limits or charges. A derivatives clearing organization shall apply appropriate limitations or charges on the concentration of assets posted as initial margin, as necessary, in order to ensure its ability to liquidate such assets quickly with minimal adverse price effects, and shall evaluate the appropriateness of any such concentration limits or charges, on at least a monthly basis.

(14) Pledged assets. If a derivatives clearing organization permits its clearing members to pledge assets for initial margin while retaining such assets in accounts in the names of such clearing members, the derivatives clearing organization shall ensure that such assets are unencumbered and that such a pledge has been validly created and validly perfected in the relevant jurisdiction.

(h) Other risk control mechanisms— (1) Risk limits. (i) A derivatives clearing organization shall impose risk limits on each clearing member, by house origin and by each customer origin, in order to prevent a clearing member from carrying positions for which the risk exposure exceeds a specified threshold relative to the clearing member’s and/or the derivatives clearing organization’s financial resources. The derivatives clearing organization shall have reasonable discretion in determining:

(A) The method of computing risk exposure;

(B) The applicable threshold(s); and

(C) The applicable financial resources under this provision; provided however, that the ratio of exposure to capital must remain the same across all capital levels. The Commission may review such methods, thresholds, and financial resources and require the application of different methods, thresholds, or financial resources, as appropriate.

(ii) A derivatives clearing organization may permit a clearing member to exceed the threshold(s) applied pursuant to paragraph (h)(1)(i) of this section provided that the derivatives clearing organization requires the clearing member to post additional initial margin that the derivatives clearing organization deems sufficient to appropriately eliminate excessive risk exposure at the clearing member. The Commission may review the amount of additional initial margin and require a different amount of additional initial margin, as appropriate.

(2) Large trader reports. A derivatives clearing organization shall obtain from its clearing members or from a relevant designated contract market or swap execution facility, copies of all reports that are required to be filed with the Commission by, or on behalf of, such clearing members pursuant to parts 17 and 20 of this chapter. A derivatives clearing organization shall review such reports on a daily basis to
ascertain the risk of the overall portfolio of each large trader, including futures, options, and swaps cleared by the derivatives clearing organization, which are held by all clearing members carrying accounts for each such large trader, and shall take additional actions with respect to such clearing members, when appropriate, as specified in paragraph (h)(6) of this section, in order to address any risks posed by any such large trader.

(3) Stress tests. A derivatives clearing organization shall conduct stress tests, as defined in §39.2 of this part, as follows:

(i) On a daily basis, a derivatives clearing organization shall conduct stress tests with respect to each large trader who poses significant risk to a clearing member or the derivatives clearing organization, including futures, options, and swaps cleared by the derivatives clearing organization, which are held by all clearing members carrying accounts for each such large trader. The derivatives clearing organization shall have reasonable discretion in determining which traders to test and the methodology used to conduct such stress tests. The Commission may review the selection of accounts and the methodology and require changes, as appropriate.

(ii) On at least a weekly basis, a derivatives clearing organization shall conduct stress tests with respect to each clearing member account, by house origin and by each customer origin, and each swap portfolio, including any portfolio containing futures and/or options and held in a commingled account pursuant to §39.15(b)(2) of this part, by beneficial owner, under extreme but plausible market conditions. The derivatives clearing organization shall have reasonable discretion in determining the methodology used to conduct such stress tests. The Commission may review the methodology and require changes, as appropriate.

(4) Portfolio compression. A derivatives clearing organization shall make portfolio compression exercises available, on a regular and voluntary basis, for its clearing members that clear swaps, to the extent that such exercises are appropriate for those swaps that it clears; provided, however, a derivatives clearing organization is not required to develop its own portfolio compression services, and is only required to make such portfolio compression exercises available, if applicable portfolio compression services have been developed by a third party.

(5) Clearing members’ risk management policies and procedures. (i) A derivatives clearing organization shall adopt rules that:

(A) Require its clearing members to maintain current written risk management policies and procedures, which address the risks that such clearing members may pose to the derivatives clearing organization;

(B) Ensure that it has the authority to request and obtain information and documents from its clearing members regarding their risk management policies, procedures, and practices, including, but not limited to, information and documents relating to the liquidity of their financial resources and their settlement procedures; and

(C) Require its clearing members to make information and documents regarding their risk management policies, procedures, and practices available to the Commission upon the Commission’s request.

(ii) A derivatives clearing organization shall review the risk management policies, procedures, and practices of each of its clearing members, which address the risks that such clearing members may pose to the derivatives clearing organization, on a periodic basis and document such reviews.

(6) Additional authority. A derivatives clearing organization shall take additional actions with respect to particular clearing members, when appropriate, based on the application of objective and prudent risk management standards including, but not limited to:

(i) Imposing enhanced capital requirements;

(ii) Imposing enhanced margin requirements;

(iii) Imposing position limits;

(iv) Prohibiting an increase in positions;

(v) Requiring a reduction of positions;

(vi) Liquidating or transferring positions; and
(vii) Suspending or revoking clearing membership.

§ 39.14 Settlement procedures.

(a) Definitions—(1) Settlement. For purposes of this section, “settlement” means:

(i) Payment and receipt of variation margin for futures, options, and swaps;
(ii) Payment and receipt of option premiums;
(iii) Deposit and withdrawal of initial margin for futures, options, and swaps;
(iv) All payments due in final settlement of futures, options, and swaps on the final settlement date with respect to such positions; and
(v) All other cash flows collected from or paid to each clearing member, including but not limited to, payments related to swaps such as coupon amounts.

(2) Settlement bank. For purposes of this section, “settlement bank” means a bank that maintains an account either for the derivatives clearing organization or for any of its clearing members, which is used for the purpose of any settlement described in paragraph (a)(1) above.

(b) Daily settlements. Except as otherwise provided by Commission order, a derivatives clearing organization shall effect a settlement with each clearing member at least once each business day, and shall have the authority and operational capacity to effect a settlement with each clearing member, on an intraday basis, either routinely, when thresholds specified by the derivatives clearing organization are breached, or in times of extreme market volatility.

(c) Settlement banks. A derivatives clearing organization shall employ settlement arrangements that eliminate or strictly limit its exposure to settlement bank risks, including the credit and liquidity risks arising from the use of such bank(s) to effect settlements with its clearing members, as follows:

(1) A derivatives clearing organization shall have documented criteria that must be met by any settlement bank used by the derivatives clearing organization or its clearing members, including criteria addressing the capitalization, creditworthiness, access to liquidity, operational reliability, and regulation or supervision of such bank(s).

(2) A derivatives clearing organization shall monitor each approved settlement bank on an ongoing basis to ensure that such bank continues to meet the criteria established pursuant to paragraph (c)(1) of this section.

(3) A derivatives clearing organization shall monitor the full range and concentration of its exposures to its own and its clearing members’ settlement bank(s) and assess its own and its clearing members’ potential losses and liquidity pressures in the event that the settlement bank with the largest share of settlement activity were to fail. A derivatives clearing organization shall take any one or more of the following actions, to the extent that any such action or actions are reasonably necessary in order to eliminate or strictly limit such exposures:

(i) Maintain settlement accounts at one or more additional settlement banks; and/or
(ii) Approve one or more additional settlement banks that its clearing members could choose to use; and/or
(iii) Impose concentration limits with respect to one or more of its own or its clearing members’ settlement banks; and/or
(iv) Take any other appropriate actions.

(d) Settlement finality. A derivatives clearing organization shall ensure that settlements are final when effected by ensuring that it has entered into legal agreements that state that settlement fund transfers are irrevocable and unconditional no later than when the derivatives clearing organization’s accounts are debited or credited; provided, however, a derivatives clearing organization’s legal agreements with its settlement banks may provide for the correction of errors. A derivatives clearing organization’s legal agreements with its settlement banks shall state clearly when settlement fund transfers will occur and a derivatives clearing organization shall routinely confirm that its settlement banks are effecting fund transfers as and when required by such legal agreements.