

**SUBMISSION COVER SHEET**

**IMPORTANT:** Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 18-270

Organization: Chicago Mercantile Exchange Inc. ("CME")

Filing as a:  DCM  SEF  DCO  SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 06/14/18 Filing Description: Implementation of the Stress Shortfall Margin Add-on Policy

**SPECIFY FILING TYPE**

Please note only ONE choice allowed per Submission.

**Organization Rules and Rule Amendments**

- Certification § 40.6(a)
- Approval § 40.5(a)
- Notification § 40.6(d)
- Advance Notice of SIDCO Rule Change § 40.10(a)
- SIDCO Emergency Rule Change § 40.10(h)

Rule Numbers: See filing.

**New Product**

Please note only ONE product per Submission.

- Certification § 40.2(a)
- Certification Security Futures § 41.23(a)
- Certification Swap Class § 40.2(d)
- Approval § 40.3(a)
- Approval Security Futures § 41.23(b)
- Novel Derivative Product Notification § 40.12(a)
- Swap Submission § 39.5

**Official Product Name:**

**Product Terms and Conditions (product related Rules and Rule Amendments)**

- Certification § 40.6(a)
- Certification Made Available to Trade Determination § 40.6(a)
- Certification Security Futures § 41.24(a)
- Delisting (No Open Interest) § 40.6(a)
- Approval § 40.5(a)
- Approval Made Available to Trade Determination § 40.5(a)
- Approval Security Futures § 41.24(c)
- Approval Amendments to enumerated agricultural products § 40.4(a), § 40.5(a)
- "Non-Material Agricultural Rule Change" § 40.4(b)(5)
- Notification § 40.6(d)

**Official Name(s) of Product(s) Affected:**

**Rule Numbers:**

June 14, 2018

**VIA ELECTRONIC PORTAL**

Mr. Christopher J. Kirkpatrick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, DC 20581

**RE: CFTC Regulation 40.6(a) Certification. Notification Regarding Implementation of Stress Shortfall Margin Add-On.  
CME Submission No. 18-270**

Dear Mr. Kirkpatrick:

Pursuant to Commodity Futures Trading Commission (“CFTC” or “Commission”) Regulation 40.6(a), Chicago Mercantile Exchange Inc. (“CME Clearing”) hereby notifies the Commission that the clearing division of CME (“CME Clearing”) is implementing a new policy to impose a Stress Shortfall Margin Add-On (the “Margin Add-On”) targeting clearing member firms with large stress shortfalls. Broad application of the add-on will begin on June 29, 2018.

The Margin Add-On will result in clearing member firms incurring a stress shortfall<sup>1</sup> greater than a predefined threshold to be reasonably determined from time to time based on market conditions (initially \$1 billion) being charged 30 percent of the amount by which their shortfall exceeds this threshold. Any such charge incurred will be called and collected as additional margin pursuant to CME Clearing’s standard margin collection processes. Consequently, we do not anticipate any changes to CME Clearing’s operational procedures to account for the implementation of the Margin Add-on.

This supplement to current margin requirements better aligns risk-taking with risk resource requirements across CME’s clearing membership base, reduces financial burdens of smaller clearing member firms, and promotes stability in the size of the guaranty fund.

By implementing the Margin Add-On targeting the clearing member firms with the largest stress shortfalls, CME Clearing will more accurately assign additional collateral requirements relative to those stress shortfalls. This collection of additional collateral thereby reduces the portion of the Cover 2 shortfall<sup>2</sup> that is allocated to firms with less directional exposure, typically small and mid-tier clearing member firms. The assignment of additional collateral requirements to those entities that pose the largest risk to the market improves incentives for those firms while simultaneously lessening the burden on firms who pose less risk to the clearinghouse or other market participants. Exhibit 1 demonstrates the application of the add-on and its impact of the Cover 2 Shortfall.

During the past year, CME Clearing has, from time to time, resized intra-month guaranty fund due to significant fluctuations in the Cover 2 Shortfall, warranting a call for additional resources from clearing member firms. CME Clearing aims to provide more stability in clearing member firms’ resource requirements via the introduction of the Margin Add-on. The Margin Add-On represents a buffer against substantial increases in the Cover 2 Shortfall by absorbing a portion of the day over day increases in the losses at the largest clearing member firms and reducing the

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<sup>1</sup> Stress shortfall is calculated as stress loss less available collateral

<sup>2</sup> The Cover 2 Shortfall represents the minimum loss that must be covered by the guaranty fund

need to call for additional resources. Exhibit 2 provides further information regarding the relationship between resource requirements and stress shortfalls for clearing member firms with discrete risk profiles.

The two primary considerations in designing the Margin Add-On were the maintenance of sufficient financial resources and ensuring that large or directional exposures were appropriately collateralized. The parameters, as currently contemplated, were calibrated to capture historically observed fluctuations in the Cover 2 Shortfall. Over the observation period, the majority of firms represented in the Cover 2 calculation had shortfalls over \$1 billion. In many instances, four or more clearing member firms exceed \$1 billion stress shortfalls. The observations indicate that firms exceeding the \$1 billion threshold should be subject to more targeted risk management practices. Please see Exhibit 3 which includes both aggregate and individual clearing member firm impacts for large portfolios.

For the avoidance of doubt, the Margin Add-On will always result in the collection of funds equal to or greater than the financial resource requirement defined under CFTC Regulation 39.33(a)(1). In some circumstances, and in line with historical observations, three (3) or more clearing member firms may have a stress shortfall greater than the threshold. In such situations, CME Clearing will collect additional collateral from these firms that will have no impact on the Cover 2 Shortfall requirement, thereby increasing the total financial resources available to CME Clearing.

The Margin Add-On will accomplish its goals of better aligning risk taking to collateral obligations and reducing volatility in the Cover 2 calculation without materially impacting CME Clearing's ability to manage default events. As evidenced by Default Scenario 1 in Exhibit 4, for the Cover 2 firms the reduction of mutualized resources is fully offset by the increased margin that they are required to deposit pursuant to the Margin Add-On. Consequently, CME's guaranty fund continues to significantly exceed the resources necessary to manage a Cover 2 default. In fact, CME Clearing's ability to manage its risk will not be materially impacted even where non-Cover 2 firms default. Default Scenarios 2 and 3 support this conclusion. In Default Scenario 2, we assume the 3<sup>rd</sup> and 4<sup>th</sup> largest net debtors default to CME Clearing. Both before and after the implementation of the Margin Add-On, significantly less than half of the guaranty fund is utilized with only a 1.4% change in utilization. Even where we assume the default of two smaller clearing members, shown in Default Scenario 3, that are unlikely to ever be required to post the Margin Add-On, there is a de minimis impact to guaranty fund utilization levels with a less than 3% utilization change and the utilization level remaining appreciably below 15% of the guaranty fund.

This limited impact on guaranty fund utilization and increase to overall collateral on deposit makes clear that the Margin Add-On does not have a material impact on the nature or level or risks faced by CME Clearing. As shown in Exhibit 3, the aggregate additional margin collected as a result of the Margin Add-On program is estimated to be \$1 billion, approximately 1% of total futures and options margin. Based on the above and the analysis provided in the Exhibits, we do not foresee a scenario where the minor adjustments to the manner in which we collateralize risk at CME Clearing, combined with the lack of change to our operational practices, will impact our ability to perform essential clearing, risk management and settlement services.

CME Clearing will evaluate the parameters of the add-on, including the threshold, on a periodic basis relative to market conditions, the size of observed shortfalls and impacts to affected clearing member firms. Revisions to the parameters of the Margin Add-On will be reviewed and approved by its internal governing bodies, as applicable. Where such changes are approved, they will be communicated to the broader market via a Clearing House Advisory Notice in advance of implementation. The Clearing House Risk Committee will be notified of such revisions at one of their regularly scheduled meetings.

### **Core Principle Review**

CME reviewed the derivatives clearing organization core principles ("DCO Core Principles") as set forth in the Commodity Exchange Act ("CEA" or "Act") and identified that the proposed amendment may have some bearing on the following principles:

- DCO Core Principle B – Financial Resources. DCO Core Principle B requires CME Clearing to maintain financial resources sufficient to enable the clearinghouse to meet its financial obligations to clearing members notwithstanding a default by the two (2) clearing members creating the largest exposure to the clearinghouse. CME Clearing will continue to maintain sufficient resources to meet the Cover 2 Shortfall. The Margin Add-

On will have no impact on its ability to do so. Instead, it may serve to reduce undue funding burdens for smaller and more risk-neutral clearing member firms, while allowing CME Clearing to continue to collect adequate resources related to guaranty fund requirements.

- DCO Core Principle D – Risk Management. DCO Core Principle D requires CME Clearing use margin and other risk controls to limit the exposures of both the clearinghouse and its members and participants in the event of default. CME Clearing will continue to employ a vast array of tools to limit such exposures, while improving its risk management practices by targeting portfolios that pose the highest potential risks to the clearinghouse and other market participants.
- DCO Core Principle E – Settlement Procedures. DCO Core Principle E requires that CME Clearing complete settlements in a timely manner and employ arrangements that eliminate or limit the exposure of the clearinghouse to settlement bank risks. The Margin Add-On will be incorporated into the existing settlement cycle. All clearing member firms will have visibility into the Margin Add-On parameters as well as the underlying data relevant to their firm. CME Clearing will communicate all relevant data at the end of every trading day which will aid in the predictability of the Margin Add-On for clearing member firms.
- DCO Core Principle L – Public Information. DCO Core Principle L requires CME Clearing to provide information to market participants with information related to the risks and costs associated with its services. CME Clearing will release a Clearing House Advisory Notice (“CHAN”) to the marketplace regarding the implementation of the Margin Add-On in advance of the effective date. The CHAN will be publicly available on the CME Group website.

CME certifies that proposed changes comply with the Act and regulations thereunder. There were no substantive opposing views to this action.

CME certifies that this submission has been concurrently posted on the CME Group website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

If you require any additional information regarding this submission, please contact me at 212.299.2200, Maureen Guilfoile at 312.930.8141, or you may contact us by email at [CFTCSubmissioninquiry@cmegroup.com](mailto:CFTCSubmissioninquiry@cmegroup.com) Please reference CME Submission No. 18-270 in any related correspondence.

Sincerely,

/s/Christopher Bowen

Managing Director and Chief Regulatory Counsel

Attachments:

- Exhibit 1 – Application of the Stress Shortfall Margin Add-on
- Exhibit 2 – Impacts to Cover 2 Requirements (confidential treatment requested)
- Exhibit 3 – Aggregate and Individual Firm Impact (confidential treatment requested)
- Exhibit 4 – Financial Resource Sufficiency in a Default Scenario (confidential treatment requested)

**Exhibit 1: Application of the Stress Shortfall Margin Add-on<sup>3</sup>**

**Current Cover 2 Shortfall**

	<b>Stress Loss</b>	<b>Collateral</b>	<b>Stress Shortfall</b>
<b>Clearing Member Firm A</b>	(2,750,000,000)	1,450,000,000	(1,300,000,000)
<b>Clearing Member Firm B</b>	(3,000,000,000)	1,750,000,000	(1,250,000,000)
	<b>Cover 2 Shortfall:</b>		<b>(2,550,000,000)</b>

The Cover 2 Shortfall is calculated by applying available collateral to the stress losses of the largest two clearing member firms, i.e. the largest stress shortfalls. In this example, Clearing Member Firms A and B have the largest stress shortfalls. The Cover 2 Shortfall of \$2.55 billion is allocated to all clearing member firms.

**Application of Stress Shortfall Margin Add-on**

	<b>Shortfall</b>	<b>30% Margin Add-on</b>
<b>Clearing Member Firm A</b>	(300,000,000)	90,000,000
<b>Clearing Member Firm B</b>	(250,000,000)	75,000,000
<b>Additional Margin Collected:</b>		<b>165,000,000</b>

Under the proposed stress shortfall Margin Add-On logic, additional margin will be collected from both Cover 2 clearing member firms, as they both exhibit shortfalls greater than \$1 billion. In this example, an additional \$165 million in margin is collected for the two firms

**New Cover 2 Shortfall**

	<b>Stress Loss</b>	<b>Collateral</b>	<b>Stress Shortfall</b>
<b>Clearing Member Firm A</b>	(2,750,000,000)	1,540,000,000.00	(1,210,000,000)
<b>Clearing Member Firm B</b>	(3,000,000,000)	1,825,000,000.00	(1,175,000,000)
	<b>New Cover 2 Shortfall:</b>		<b>(2,385,000,000)</b>

The margin collected is included in the collateral applied to each Cover 2 clearing member firm's stress loss. The additional \$165 million reduces the Cover 2 Shortfall to \$2.385 billion, which is then allocated to clearing members, lowering funding costs of less risky clearing member firms by 30 percent.

As a result, CME Clearing can continue to maintain sufficient financial resources to meet its requirements under 39.33, while better pairing collateral requirements with corresponding exposures.

<sup>3</sup> All figures included in this exhibit are for demonstration purposes only and do not represent actual clearing member firm stress results

**Exhibit 2: Impacts to Cover 2 Requirements**

**(Confidential Treatment Requested)**

**(Attached under separate cover as CME Submission 18-270S Appendix A)**

**Exhibit 3: Aggregate and Individual Firm Impacts**

**(Confidential Treatment Requested)**

**(Attached under separate cover as CME Submission 18-270S Appendix B)**

**Exhibit 4: Financial Resource Sufficiency in a Default Scenario**  
**(Confidential Treatment Requested)**  
**(Attached under separate cover as CME Submission 18-270S Appendix C)**