



Registration of a Charge

Company Name: **NATWEST MARKETS PLC**

Company Number: **SC090312**



Received for filing in Electronic Format on the: **02/05/2023**

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Details of Charge

Date of creation: **26/04/2023**

Charge code: **SC09 0312 0145**

Persons entitled: **CITIBANK, N.A. IN ITS CAPACITY AS COLLATERAL AGENT**

Brief description:

Contains fixed charge(s).

Contains negative pledge.

Authentication of Form

This form was authorised by: **a person with an interest in the registration of the charge.**

Authentication of Instrument

Certification statement: **I CERTIFY THAT SAVE FOR MATERIAL REDACTED PURSUANT TO S.859G OF THE COMPANIES ACT 2006 THE ELECTRONIC COPY INSTRUMENT DELIVERED AS PART OF THIS APPLICATION FOR REGISTRATION IS A CORRECT COPY OF THE ELECTRONIC COPY OF THE ORIGINAL INSTRUMENT.**

Certified by: **OSCAR RATCLIFFE**



CERTIFICATE OF THE REGISTRATION OF A CHARGE

Company number: 90312

Charge code: SC09 0312 0145

The Registrar of Companies for Scotland hereby certifies that a charge dated 26th April 2023 and created by NATWEST MARKETS PLC was delivered pursuant to Chapter A1 Part 25 of the Companies Act 2006 on 2nd May 2023 .

Given at Companies House, Edinburgh on 2nd May 2023

The above information was communicated by electronic means and authenticated by the Registrar of Companies under section 1115 of the Companies Act 2006



Companies House



**THE OFFICIAL SEAL OF THE
REGISTRAR OF COMPANIES**

**AMENDMENT NO. 17
TO SECURITY AND PLEDGE AGREEMENT**

This **AMENDMENT NO. 17 TO SECURITY AND PLEDGE AGREEMENT** (this “*Amendment*”) dated as of April 26, 2023 is among **CHICAGO MERCANTILE EXCHANGE INC.**, a Delaware corporation (the “*Company*”), the entities identified under the heading “CLEARING MEMBERS” on the signature pages hereto (the “*Clearing Members*”) and **CITIBANK, N.A.**, in its capacity as Collateral Agent (in such capacity, the “*Collateral Agent*”). Capitalized terms used in this Amendment not otherwise defined herein shall have the respective meanings given thereto in the Security and Pledge Agreement or the Credit Agreement (each as herein defined), as applicable.

WITNESSETH:

WHEREAS, the Company, the Administrative Agent, the Collateral Agent, the Collateral Monitoring Agent and certain Banks entered into that certain Credit Agreement dated as of November 2, 2017, as amended by Amendment No. 1 to Credit Agreement and Bank Joinder Agreement, dated as of November 1, 2018 (“*Amendment No. 1*”), among the Company, the Banks party thereto, Administrative Agent, Collateral Agent and Collateral Monitoring Agent, as amended by Amendment No. 2 to Credit Agreement, dated as of May 1, 2019 (“*Amendment No. 2*”), among the Company, the Banks party thereto, Administrative Agent, Collateral Agent and Collateral Monitoring Agent, as amended by Amendment No. 3 to Credit Agreement, dated as of April 29, 2020 (“*Amendment No. 3*”), among the Company, the Banks party thereto, Administrative Agent, Collateral Agent and Collateral Monitoring Agent, as amended by Amendment No. 4 to Credit Agreement, dated as of February 5, 2021 (“*Amendment No. 4*”), among the Company, the Banks party thereto, Administrative Agent, Collateral Agent and Collateral Monitoring Agent, as amended by Amendment No. 5 to Credit Agreement, dated as of April 28, 2021 (“*Amendment No. 5*”), as amended by Amendment No. 6 to Credit Agreement, dated as of April 27, 2022 (“*Amendment No. 6*”), as amended by Amendment No. 7 to Credit Agreement, dated as of the date hereof (“*Amendment No. 7*”), among the Company, the Banks party thereto, Administrative Agent, Collateral Agent and Collateral Monitoring Agent (such Credit Agreement, as amended by Amendment No. 1, Amendment No. 2, Amendment No. 3, Amendment No. 4, Amendment No. 5, Amendment No. 6 and Amendment No. 7, and as further amended, modified, supplemented, restated, or amended and restated, the “*Credit Agreement*”);

WHEREAS, the Company, certain of the Clearing Members, certain financial institutions that were previously clearing members and the Collateral Agent entered into that certain Security and Pledge Agreement dated as of November 2, 2017, as amended by Amendment No. 1 to Security and Pledge Agreement dated as of March 15, 2018, as amended by Amendment No. 2 to Security and Pledge Agreement dated as of November 1, 2018, as amended by the Joinder dated as of November 1, 2018, as amended by Amendment No. 3 to Security and Pledge Agreement dated as of December 28, 2018, as amended by Amendment No. 4 to Security and Pledge Agreement dated as of March 13, 2019, as amended by the Joinder dated as of August 1, 2019, as amended by Amendment No. 5 to Security and Pledge Agreement dated as of November 4, 2019, as amended by Amendment No. 6 to Security and Pledge Agreement dated as of December 4, 2019, as amended by the Joinder dated as of December 4, 2019, as amended by Amendment No.

7 to Security and Pledge Agreement dated as of February 7, 2020, as amended by Amendment No. 8 to Security and Pledge Agreement dated as of April 29, 2020, as amended by Amendment No. 9 to Security and Pledge Agreement dated as of August 24, 2020, as amended by Amendment No. 10 to Security and Pledge Agreement dated as of November 4, 2020, as amended by Amendment No. 11 to Security and Pledge Agreement dated as of February 5, 2021, as amended by Amendment No. 12 to Security and Pledge Agreement dated as of April 28, 2021 and as amended by Amendment No. 13 to Security and Pledge Agreement dated as of July 19, 2021, as amended by Amendment No. 14 to Security and Pledge Agreement dated as of January 13, 2022, as amended by the Joinder dated as of April 14, 2022, as amended by Amendment No. 15 to Security and Pledge Agreement dated as of April 27, 2022, as amended by Amendment No. 16 to Security and Pledge Agreement dated as of July 28, 2022, and as amended by the Joinder dated as of September 30, 2022 (collectively, the “*Existing Security and Pledge Agreement*”, and as hereby amended and as further amended, modified, supplemented, restated, or amended and restated, the “*Security and Pledge Agreement*”) pursuant to which the Company and the Clearing Members have granted to the Collateral Agent for the benefit of the Secured Parties a first priority security interest in all of the Collateral (as defined in the Security and Pledge Agreement);

WHEREAS, the Company and the Clearing Members have requested, and the Collateral Agent has agreed to amend the Existing Security and Pledge Agreement in such a manner that, upon giving effect to such amendments, the Existing Security and Pledge Agreement as so amended would contain the terms, covenants, conditions and other provisions as contained in the form of Security and Pledge Agreement set forth as **Annex A** to this Amendment (the “*Consolidated Form Security and Pledge Agreement*”), and the Collateral Agent is willing to effect such amendments on the terms and conditions contained in this Amendment;

NOW, THEREFORE, in consideration of the premises and further valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. **Amendments to Loan Documents.** Subject to the terms and conditions set forth herein, the Existing Security and Pledge Agreement is hereby amended so that, as amended, it shall read as set forth in, and shall have the terms, covenants, conditions and other provisions of, the Consolidated Form Security and Pledge Agreement, the terms, covenants, conditions and other provisions of which Consolidated Form Security and Pledge Agreement are hereby incorporated by reference into this Amendment as if fully set forth herein. The Company, the Clearing Members and the Collateral Agent acknowledge and agree that each amendment to the Security and Pledge Agreement reflected in the Consolidated Form Security and Pledge Agreement is and shall be effective as if individually specified in this Amendment (the Company, the Clearing Members and the Collateral Agent further acknowledging that amending the Existing Security and Pledge Agreement by reference to the Consolidated Form Security and Pledge Agreement provides a convenience to such parties to permit the amended terms to be read in full context), and that this Amendment is not a novation of the Security and Pledge Agreement or any other Loan Document or of any credit facility provided thereunder or in respect thereof. For ease of review, the original signature pages have been removed from the Consolidated Form Security and Pledge Agreement. Notwithstanding that the first page of the Consolidated Form Security and Pledge Agreement is dated “as of November 2, 2017”, the changes to the Existing Security and Pledge Agreement

effected by this Amendment shall be effective as of the satisfaction or waiver to the conditions to effectiveness set forth in Section 2 of this Amendment.

2. **Effectiveness; Conditions Precedent.** This Amendment shall become effective at the time (the “*Amendment Effective Date*”) when each of the following conditions has been satisfied (and the Administrative Agent shall give notice to the Company of the effectiveness of this Amendment):

a. The Administrative Agent shall have received counterparts of this Amendment duly executed by the Company, each Clearing Member and the Collateral Agent.

b. Each of the conditions set forth in Section 3 of that certain Amendment No. 7 to Credit Agreement dated as of the date hereof among the Company, the Administrative Agent, the Collateral Agent, the Collateral Monitoring Agent and the Banks party thereto shall have been (or substantially simultaneously with the effectiveness of this Amendment, shall be) satisfied.

3. **Representations and Warranties.**

a. In order to induce the Collateral Agent to enter into this Amendment, the Company represents and warrants to the Administrative Agent, the Collateral Agent, the Collateral Monitoring Agent and each Bank as follows:

i. At the time of and immediately after giving effect to this Amendment, (i) the representations and warranties of the Company applicable to the Company set forth in Article IV of the Security and Pledge Agreement shall be true and correct in all material respects (or, in the case of any such representation or warranty already qualified by materiality, in all respects) on and as of the date hereof (except to the extent that such representations and warranties specifically refer to an earlier date, in which case as of such earlier date) and (ii) no Default or Unmatured Default has occurred and is continuing.

ii. This Amendment has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency or similar laws affecting the enforcement of creditors’ rights generally and by general principles of equity (whether enforcement is considered in a proceeding at law or in equity).

b. In order to induce the Collateral Agent to enter into this Amendment, each Clearing Member represents and warrants to the Administrative Agent, the Collateral Agent, the Collateral Monitoring Agent and each Bank as follows:

i. At the time of and immediately after giving effect to this Amendment, (i) the representations and warranties of such Clearing Member applicable to such Clearing Member set forth in Article IV of the Security and Pledge Agreement shall be true and correct in all material respects (or, in the case of any such representation or warranty already qualified by materiality, in all respects) on and as of the date hereof (except to the extent that such representations and warranties specifically refer to an earlier date, in which case as of such earlier date).

ii. Each Clearing Member has the power and authority (corporate or otherwise) and legal right to execute and deliver this Amendment and to perform its obligations hereunder and has granted to the Company, pursuant to CME Rules 816, 817 and 820, CBOT Rules 816, 817 and 820, NYMEX Rules 816, 817 and 820 and any other similar applicable Rules, the power to execute and deliver this Amendment on such Clearing Member's behalf as Member Attorney-in-Fact. Each Clearing Member's entering into this Amendment and the performance of its obligations hereunder have been duly authorized by proper proceedings (corporate or otherwise). This Amendment has been duly executed and delivered by the Company, as attorney in fact for each Clearing Member and constitutes each Clearing Member's legal, valid and binding obligation, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency or similar laws affecting the enforcement of creditors' rights generally and by general principles of equity (whether enforcement is considered in a proceeding at law or equity).

4. **Entire Agreement.** This Amendment, together with the Credit Agreement, including the Annexes, Schedules and Exhibits thereto, the Reaffirmation Agreement and Security and Pledge Agreement, (collectively, the "***Relevant Documents***"), sets forth the entire understanding and agreement of the parties hereto in relation to the subject matter hereof and supersedes any prior negotiations and agreements among the parties relating to such subject matter. No promise, condition, representation or warranty, express or implied, not set forth in the Relevant Documents shall bind any party hereto, and no such party has relied on any such promise, condition, representation or warranty. Each of the parties hereto acknowledges that, except as otherwise expressly stated in the Relevant Documents, no representations, warranties or commitments, express or implied, have been made by any party to any other party in relation to the subject matter hereof or thereof. None of the terms or conditions of this Amendment may be changed, modified, waived or canceled orally or otherwise, except in writing and in accordance with **Section 8.5** of the Security and Pledge Agreement.

5. **Full Force and Effect of Agreement.** Except as hereby specifically amended, modified or supplemented, the Security and Pledge Agreement is hereby confirmed and ratified in all respects and shall be and remain in full force and effect according to its terms.

6. **Counterparts.** This Amendment may be executed in any number of counterparts, all of which taken together shall constitute one agreement, and any of the parties hereto may execute this Amendment by signing any such counterpart. Delivery of an executed signature page by facsimile or email shall be effective as delivery of an original executed counterpart hereof. The parties hereto acknowledge that Article XIV of the Credit Agreement regarding Communications and Electronic Signatures is applicable to this Amendment.

7. **Governing Law.** THIS AMENDMENT SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAW OF THE STATE OF NEW YORK. The parties hereto hereby irrevocably submits to the exclusive jurisdiction of any United States federal or New York state court sitting in New York, New York, in any action or proceeding arising out of or relating to this Amendment, and each of the parties hereto hereby irrevocably agrees that all claims in respect of any such action or proceeding may be heard and determined in any such court. This Amendment shall be further subject to the provisions of **Sections 8.1** of the Security and Pledge Agreement.

8. **WAIVER OF TRIAL BY JURY.** TO THE EXTENT PERMITTED BY APPLICABLE LAW, EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ALL RIGHT OF TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR IN CONNECTION WITH THIS AMENDMENT OR ANY MATTER ARISING HEREUNDER.

9. **Severability of Provisions.** Any provision of this Amendment held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or enforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

10. **References.** All references to the “Security and Pledge Agreement” in the Loan Documents (other than the Security and Pledge Agreement), and all references to the “Agreement” in the Security and Pledge Agreement, shall mean the Existing Security and Pledge Agreement, as amended hereby and as further amended, restated, supplemented or otherwise modified from time to time. This Amendment shall constitute a Loan Document.

11. **Successors and Assigns.** This Amendment shall be binding upon and inure to the benefit of the Company, each Clearing Member, the Collateral Agent and each holder of the Obligations and their respective successors and assigns to the extent such successors and assigns are permitted as provided in Section 9.2, Section 10.6 and Section 11.1 of the Credit Agreement, in the case of the Company, any Agents, and any Bank, respectively.

[Signature pages follow.]

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be made, executed and delivered by their duly authorized officers as of the day and year first above written.


CHICAGO MERCANTILE EXCHANGE INC.

By: 
Name: Suzanne Sprague
Title: Senior Managing Director, Global Head of
Clearing and Post-Trade Services

CLEARING MEMBERS:


ABN AMRO Clearing Chicago LLC
ADM Investor Services, Inc.
Advantage Futures, LLC
Banco Bilbao Vizcaya Argentaria, S.A.
Bank of Montreal
Barclays Capital Inc.
BMO Capital Markets Corp.
BNP Paribas
BNP Paribas Securities Corp.
BofA Securities, Inc.
BP Energy Company
BP Products North America Inc.
Bunge Chicago, Inc.
Cantor Fitzgerald & Co.
CHS Hedging, LLC
CIBC World Markets Corp.
Citigroup Global Markets Inc.
Credit Agricole Corporate and Investment Bank
Credit Suisse International
Credit Suisse Securities (USA) LLC
Cunningham Commodities, LLC
Daiwa Capital Markets America Inc.
Deutsche Bank AG
Deutsche Bank Securities Inc.
Direct Access USA LLC
Dorman Trading, L.L.C.
DRW Execution Services, LLC
Eagle Market Makers, Inc.
G.H. Financials, LLC
Gelber Group, LLC
Goldman Sachs & Co. LLC
Hidden Road Partners CIV US LLC
HSBC Securities (USA) Inc.

By: Chicago Mercantile Exchange Inc.,
as Member Attorney-in-Fact

By: 
Name: Suzanne Sprague
Title: Senior Managing Director, Global
Head of Clearing and Post-Trade
Services

Interactive Brokers LLC
Ironbeam, Inc.
J.P. Morgan Securities LLC
Jump Trading Futures, LLC
Logista Clearing Corporation LLC
Macquarie Futures USA LLC
Marex Capital Markets Inc.
Marex North America LLC
Mizuho Securities USA LLC
Morgan Stanley & Co. LLC
Nanhua USA LLC
NatWest Markets Plc
NatWest Markets Securities Inc.
Nomura Securities International, Inc.
Phillip Capital Inc.
Proxima Clearing, LLC
R.J. O'Brien & Associates, LLC
Rabo Securities USA Inc.
RBC Capital Markets, LLC
Royal Bank of Canada
Santander US Capital Markets LLC
Scotia Capital (USA) Inc.
SG Americas Securities LLC
Societe Generale
Standard Chartered Bank
StoneX Financial Inc.
Straits Financial LLC
Term Commodities Inc.
The Bank of Nova Scotia
The Toronto-Dominion Bank
TradeStation Securities, Inc.
UBS Securities LLC
Wedbush Securities, Inc.
Wells Fargo Securities, LLC

By: Chicago Mercantile Exchange Inc.,
as Member Attorney-in-Fact

By: 
Name: Suzanne Sprague
Title: Senior Managing Director,
Global Head of Clearing and
Post-Trade Services

CITIBANK, N.A., as Collateral Agent

By: _____

Name: Jenny Cheng

Title: Senior Trust Officer

Consolidated Form Security and Pledge Agreement

See attached.

**ANNEX A
TO AMENDMENT NO. 17 TO SECURITY AND PLEDGE AGREEMENT**

AMENDED SECURITY AND PLEDGE AGREEMENT

as amended as of March 15, 2018, and as amended as of November 1, 2018,
and as amended as of December 28, 2018, and as amended as of March 13, 2019,
and as amended by Joinder as of August 1, 2019,
and as amended as of November 4, 2019, and as amended as of December 4, 2019,
and as amended as of February 7, 2020, and as amended as of April 29, 2020,
and as amended as of August 24, 2020, and as amended as of November 4, 2020,
and as amended as of February 5, 2021, and as amended as of April 28, 2021,
and as amended as of July 19, 2021, and as amended as of January 13, 2022,
and as amended by Joinder as of April 14, 2022, and as amended as of April 27, 2022,
and as amended July 28, 2022, and as amended by Joinder as of September 30, 2022
and as amended April 26, 2023

SECURITY AND PLEDGE AGREEMENT

Dated as of November 2, 2017

among

CHICAGO MERCANTILE EXCHANGE INC.,

and

THE OTHER GRANTORS PARTIES HERETO,

and

CITIBANK, N.A. ACTING THROUGH ITS AGENCY AND TRUST DIVISION,
as Collateral Agent

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SECURITY AND PLEDGE AGREEMENT

SECURITY AND PLEDGE AGREEMENT (this “**Agreement**”), dated as of November 2, 2017, among Chicago Mercantile Exchange Inc., a Delaware corporation (“**CME**”), (subject to the provisions of Section 8.7 hereof) the Clearing Members set forth on Schedule XXXVI attached hereto (as such Schedule may be amended, supplemented or otherwise modified from time to time pursuant to the terms hereof) and each Clearing Member that becomes a “**Grantor**” party hereto from time to time (each, together with CME in its individually capacity, individually, a “**Grantor**” and collectively, together with CME in its individual capacity as a Grantor hereunder, the “**Grantors**”), and Citibank, N.A., acting through its Agency and Trust Division, as collateral agent, for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks party to the Credit Agreement (together with its successors and assigns, in such capacity, the “**Collateral Agent**”).

RECITALS

CME, Bank of America, N.A., as administrative agent and Citibank, N.A., acting through its Agency and Trust Division, as Collateral Agent, Citibank, N.A., as collateral monitoring agent (together with its successors and assigns, in such capacity, the “**Collateral Monitoring Agent**”) and the Banks party thereto have entered into that certain Credit Agreement, dated as of November 2, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the “**Credit Agreement**”), pursuant to which the Banks have agreed to make certain Advances to CME and the Collateral Agent has agreed to act as collateral agent on behalf of the Agents and the Banks.

Pursuant to the Rules, the Clearing Members have made available to the Clearing House certain Security Deposits and Performance Bonds to secure their obligations to the Clearing House.

Pursuant to the Rules, CME is authorized to act as Member Attorney-in-Fact for the Clearing Members, including for the purpose of executing and delivering this Agreement and granting a security interest to the Collateral Agent, for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks, in the Security Deposits and in the Performance Bonds made available to the Clearing House by such Clearing Members, which security interest, together with the security interest granted by CME to the Collateral Agent in its individual capacity as a Grantor hereunder, shall secure the Secured Obligations.

It is a condition precedent to the obligations of the Banks to enter into and perform their obligations under, and to extend to CME the financial accommodations contemplated by, the Credit Agreement that, *inter alia*, each Grantor enters into this Agreement.

AGREEMENT

NOW, THEREFORE, each Grantor hereby agrees with the Collateral Agent, for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks, as follows:

ARTICLE I DEFINITIONS

1.1 Defined Terms. Capitalized terms used herein and not defined herein shall have the respective meanings assigned thereto in the Credit Agreement. In addition, the following terms shall have the following meanings:

“Applicable Other Depository” means (a) with respect to any Other Clearing Member Customer Collateral Deposit Account, the Person identified in Schedule XXV (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent) as the Applicable Other Depository for such Deposit Account, (b) with respect to any Other Clearing Member Collateral Deposit Account, the Person identified in Schedule XXVI (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent) as the Applicable Other Depository for such Deposit Account and (c) with respect to any Other Company Deposit Account, the Person identified in Schedule XXVII (as such Schedule may be updated from time to time after the date hereof following written notice to and acknowledgment by the Collateral Agent) as the Applicable Other Depository for such Deposit Account, and in the case of each of clause (a), (b) or (c), refers to such Person acting solely in its capacity as a “bank” as defined in Section 9-102(a)(8) of the UCC; provided that, each such Applicable Other Depository shall be such a bank with a jurisdiction (as determined pursuant to Section 9-304(b) of the UCC) in the United States of America.

“Applicable Other Securities Intermediary” means (a) with respect to any Other Clearing Member Customer Collateral Securities Account, the Person identified in Schedule XIX (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent) as the Applicable Other Securities Intermediary for such Securities Account, (b) with respect to any Other Clearing Member Collateral Securities Account, the Person identified in Schedule XX (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent) as the Applicable Other Securities Intermediary for such Securities Account and (c) with respect to any Other Company Securities Account, the Person identified in Schedule XXXIII (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent) as the Applicable Other Securities Intermediary for such Securities Account, and in the case of each of clause (a), (b) or (c), refers to such Person acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“Applicable Other Triggering Event” means, with respect to any Other Clearing Member Customer Collateral Securities Account, any Other Clearing Member Customer Collateral Deposit Account or Other Clearing Member Customer FX Account, as the case may be, the time at which all of the following have occurred: (a) such Other Clearing Member Customer Collateral Securities Account, Other Clearing Member Customer Collateral Deposit Account or Other Clearing Member Customer FX Account, as the case may be, is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“Bank of China Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule II hereto (including after giving effect to any Securities Accounts added to or removed from Schedule II (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the Bank of China Securities Intermediary in accordance with Section 3.1(h).

“Bank of China Collateral Securities Account” means each of the Securities Accounts listed on Schedule III hereto (including after giving effect to any Securities Accounts added to or removed from Schedule III (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the Bank of China Securities Intermediary in accordance with Section 3.1(h).

“Bank of China Securities Account” means each Bank of China Clearing Member Customer Collateral Account and Bank of China Collateral Securities Account.

“Bank of China Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the Bank of China Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Bank of China Securities Intermediary” means Bank of China Ltd, New York Branch acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“Bank of China Triggering Event” means, with respect to any particular Bank of China Clearing Member Customer Collateral Account, the time at which all of the following have occurred: (a) such Bank of China Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“BBH Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule IV hereto (including after giving effect to any Securities Accounts added to or removed from Schedule IV (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BBH Securities Intermediary in accordance with Section 3.1(e).

“BBH Collateral Securities Account” means each of the Securities Accounts listed on Schedule V hereto (including after giving effect to any Securities Accounts added to or removed from Schedule V (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BBH Securities Intermediary in accordance with Section 3.1(e).

“BBH Securities Account” means each BBH Clearing Member Customer Collateral Account and BBH Collateral Securities Account.

“BBH Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the BBH Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“BBH Securities Intermediary” means Brown Brothers Harriman & Co. (or State Street Bank and Trust Company or any of its applicable affiliates, as assignee) acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“BBH Triggering Event” means, with respect to any particular BBH Clearing Member Customer Collateral Account, the time at which all of the following have occurred: (a) such BBH Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“BMO Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule VI hereto (including after giving effect to any Securities Accounts added to or removed from Schedule VI (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BMO Securities Intermediary in accordance with Section 3.1(f).

“BMO Collateral Securities Account” means each of the Securities Accounts listed on Schedule VII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule VII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BMO Securities Intermediary in accordance with Section 3.1(f).

“BMO Securities Account” means each BMO Clearing Member Customer Collateral Account and BMO Collateral Securities Account.

“BMO Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the BMO Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“BMO Securities Intermediary” means BMO Harris Bank, N.A. acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“BMO Triggering Event” means, with respect to any particular BMO Clearing Member Customer Collateral Account, the time at which all of the following have occurred: (a) such BMO Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“BNP Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule VIII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule VIII (to the extent such addition or removal is permitted by the Loan Documents) after the

date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BNP Securities Intermediary in accordance with Section 3.1(g).

“BNP Collateral Securities Account” means each of the Securities Accounts listed on Schedule IX hereto (including after giving effect to any Securities Accounts added to or removed from Schedule IX (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BNP Securities Intermediary in accordance with Section 3.1(g).

“BNP Securities Account” means each BNP Clearing Member Customer Collateral Account and BNP Collateral Securities Account.

“BNP Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the BNP Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“BNP Securities Intermediary” means BNP Paribas acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“BNP Triggering Event” means, with respect to any particular BNP Clearing Member Customer Collateral Account, the time at which all of the following have occurred: (a) such BNP Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“BNY Mellon Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule X hereto (including after giving effect to any Securities Accounts added to or removed from Schedule X (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BNY Mellon Securities Intermediary in accordance with Section 3.1(a).

“BNY Mellon Collateral Securities Account” means each of the Securities Accounts listed on Schedule XI hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XI (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the BNY Mellon Securities Intermediary in accordance with Section 3.1(a).

“BNY Mellon Securities Account” means each BNY Mellon Clearing Member Customer Collateral Account and BNY Mellon Collateral Securities Account.

“BNY Mellon Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the BNY Mellon Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to

the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“BNY Mellon Securities Intermediary” means The Bank of New York Mellon acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“BNY Mellon Triggering Event” means, with respect to any particular BNY Mellon Clearing Member Customer Collateral Account, the time at which all of the following have occurred: (a) such BNY Mellon Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“Book-Entry Securities” means securities maintained in the form of entries (including, without limitation, the Security Entitlements in, and the Financial Assets based on, such securities) in the commercial book-entry system of the Fed and held for the related Entitlement Holder by a Fed Member. Book-Entry Securities shall not include, in any event, any Certificated Security (or any Security Entitlement in, or Financial Asset based on, any Certificated Security).

“Bullion Account” means any of the JPMorgan Bullion Account and any Other Bullion Accounts and **“Bullion Accounts”** means each of the foregoing.

“Bullion Account Bank” means any JPMorgan Bullion Account Bank and any Other Bullion Account Bank and **“Bullion Account Banks”** means each of the foregoing.

“Bullion Security Agreement” means any of the JPMorgan Bullion Security Agreement and any Other Bullion Security Agreement and **“Bullion Security Agreements”** means each of the foregoing.

“Cash” means any cash, money or funds of any kind, including without limitation any such cash, money or funds denominated in U.S. Dollars or any Alternative Currency.

“Certificated Security” has the meaning given in Section 8-102(a)(4) of the UCC.

“Citibank Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule XII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the Citibank Securities Intermediary in accordance with Section 3.1(b).

“Citibank Collateral Securities Account” means each of the Securities Accounts listed on Schedule XIII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XIII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent), in each case as established and maintained with the Citibank Securities Intermediary in accordance with Section 3.1(b).

“Citibank Company Securities Account” means each of the Securities Accounts listed on Schedule XIV hereto (including after giving effect to any Securities Accounts added to or removed from

Schedule XIV (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgment by the Collateral Agent), in each case as established and maintained with the Citibank Securities Intermediary in accordance with Section 3.1(b).

“Citibank Securities Account” means each Citibank Clearing Member Customer Collateral Account, each Citibank Company Securities Account, and each Citibank Collateral Securities Account.

“Citibank Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the Citibank Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Citibank Securities Intermediary” means Citibank, N.A. acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC.

“Citibank Triggering Event” means, with respect to any particular Citibank Clearing Member Customer Collateral Account, the time at which all of the following have occurred: (a) such Citibank Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“Clearing Member Collateral Securities Account” means each Bank of China Collateral Securities Account, each BBH Collateral Securities Account, each BMO Collateral Securities Account, each BNP Collateral Securities Account, each BNY Mellon Collateral Securities Account, each Citibank Collateral Securities Account, each JPMorgan Collateral Securities Account, each Lakeside Bank Collateral Securities Account and each Other Clearing Member Collateral Securities Account.

“Clearing Member Customer Collateral Account” means each Bank of China Clearing Member Customer Collateral Account, BBH Clearing Member Customer Collateral Account, BMO Clearing Member Customer Collateral Account, BNP Clearing Member Customer Collateral Account, BNY Mellon Clearing Member Customer Collateral Account, Citibank Clearing Member Customer Collateral Account, JPMorgan Clearing Member Customer Collateral Account, Lakeside Bank Clearing Member Customer Collateral Account, each Other Clearing Member Customer Collateral Securities Account and each Other Clearing Member Customer Collateral Deposit Account.

“Clearing Member Customer FX Account” means any of the JPMorgan Clearing Member Customer FX Account and any Other Clearing Member Customer FX Account and **“Clearing Member Customer FX Accounts”** means each of the foregoing.

“Clearing Member Customer Gold Warrant” means an electronic document of title (within the meaning of Section 1-201(b)(16) of the UCC) issued by a Gold Warrants Issuer identified therein that (i) identifies the gold covered thereby in the manner set forth on Schedule XXVIII hereto (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent), (ii) is issued to CME and (iii) is set forth on and identified as a “Clearing Member Customer Gold Warrant” in a Collateral Notice.

“Clearing Member Customer Gold Warrant Advance Depositary” means Citibank, N.A., acting solely in its capacity as a “bank” as defined in Section 9-102(a)(8) of the UCC.

“Clearing Member Customer Gold Warrant Advance Deposit Account” means each of the Deposit Accounts listed on Schedule XXXVIII hereto (including after giving effect to any Deposit Accounts added to or removed from Schedule XXXVIII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Clearing Member Customer Gold Warrant Advance Depositary in accordance with Section 3.1(n).

“Clearing Member Customer Gold Warrant Advance Deposit Account Collateral” means all Cash and other property held in or credited to each Clearing Member Customer Gold Warrant Advance Deposit Account.

“Clearing Member Customer Gold Warrant Advance Deposit Account Control Agreement” means one or more Deposit Account Control Agreements by and among the applicable Grantors, the Clearing Member Customer Gold Warrant Advance Depositary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Clearing Member FX Account” means any of the JPMorgan Clearing Member FX Accounts and any Other Clearing Member FX Account and **“Clearing Member FX Accounts”** means each of the foregoing.

“Clearing Member Money Fund Shares” means all of the shares, units or other interests, however denominated, of a Money Fund Issuer held in book-entry form, registered on the books of such Money Fund Issuer or any transfer or servicing agent for such Money Fund Issuer in the names listed on Schedule XXII.

“Clearing Member Security” means any Eligible Asset of a Clearing Member (other than any Money Fund Share, the Gold Bullion, any Gold Warrants and the FX Account Collateral) which CME, as Member Attorney-in-Fact, is authorized to pledge as security for any Loan in accordance with the Rules, free and clear of any Lien (other than any Lien created pursuant to this Agreement or permitted by Section 7.8 of the Credit Agreement).

“Closing Date Collateral” has the meaning set forth in Section 2.1(a).

“Collateral” has the meaning set forth in Section 2.1(b).

“Collateral Pool” means at any date of determination, the collective reference to:

(a) all Clearing Member Securities then or theretofore transferred to or held in any Clearing Member Customer Collateral Account and not released from such account (other than in connection with a transfer of such Clearing Member Securities to a Clearing Member Collateral Securities Account in accordance with Section 7.14 of the Credit Agreement) and identified in a Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement, which Clearing Member Securities, Clearing Member Customer Collateral Account and (if applicable) Clearing Member Collateral Securities Account are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement;

(b) all Company Securities then or theretofore transferred to or held in any Company Securities Account and not released from such account, which Company Securities and Company Securities Account are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement;

(c) all Clearing Member Securities and Company Securities then or theretofore transferred to or held in (and not released from) any Clearing Member Collateral Securities Account or Company Securities Account, which Clearing Member Securities, Company Securities, Clearing Member Collateral Securities Account or Company Securities Account, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement;

(d) the Proceeds of the Clearing Member Securities and Company Securities then on deposit in each Clearing Member Customer Collateral Account or Company Securities Account, as applicable and identified in a Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement;

(e) the Clearing Member Money Fund Shares that constitute Eligible Assets, which Clearing Member Money Fund Shares are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement and subject to a Money Fund Control Agreement;

(f) the Proceeds of the Clearing Member Money Fund Shares, in each case subject to the perfected, first priority Lien of the Collateral Agent under this Agreement and subject to a Money Fund Control Agreement;

(g) the Gold Bullion (if any) of the Clearing Members, which Gold Bullion is, in each case, subject to the perfected, first priority Lien of the Collateral Agent under any Bullion Security Agreement;

(h) the Gold Warrants (if any) of the Clearing Members, which Gold Warrants are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement and the Gold Warrant Collateral Documents;

(i) the Clearing Member FX Account, the Clearing Member Customer FX Account and all FX Collateral deposited in or credited to each Clearing Member FX Account or Clearing Member Customer FX Account, which Clearing Member FX Account, Clearing Member Customer FX Account and FX Collateral are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement; and

(j) the Proceeds of the FX Collateral then on deposit in each Clearing Member FX Account or Clearing Member Customer FX Account, as applicable and identified in a Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement;

(k) all Other Deposit Account Collateral then or theretofore transferred to or held in any Other Clearing Member Customer Collateral Deposit Account and not released from such account (other than in connection with a transfer of such Other Deposit Account Collateral to an Other Clearing Member Collateral Deposit Account in accordance with Section 7.14 of the Credit Agreement) and identified in a Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement, which Other Deposit Account Collateral, Other Clearing Member Customer Deposit Account and (if applicable) Other Clearing Member Collateral Deposit Account are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement;

(l) all Other Deposit Account Collateral then or theretofore transferred to or held in any Other Company Deposit Account and not released from such account, which Other Deposit Account Collateral,

and Other Company Deposit Account are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement;

(m) all Other Deposit Account Collateral then or theretofore transferred to or held in (and not released from) any Other Clearing Member Collateral Deposit Account or Other Company Deposit Account, which Other Deposit Account Collateral, Other Clearing Member Collateral Deposit Account and Other Company Deposit Account are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement;

(n) the Proceeds of the Other Deposit Account Collateral then on deposit in each Other Clearing Member Customer Deposit Account, Other Clearing Member Deposit Account or Other Company Deposit Account, as applicable, and identified in a Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement;

(o) all Clearing Member Customer Gold Warrant Advance Deposit Account Collateral then or theretofore transferred to or held in any Clearing Member Customer Gold Warrant Advance Deposit Account and not released from such account, which Clearing Member Customer Gold Warrant Advance Deposit Account Collateral, and Clearing Member Customer Gold Warrant Advance Deposit Account are, in each case, subject to the perfected, first priority Lien of the Collateral Agent under this Agreement; and

(p) the Proceeds of the Clearing Member Customer Gold Warrant Advance Deposit Account Collateral then on deposit in each Clearing Member Customer Gold Warrant Advance Deposit Account and identified in a Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement.

“Company Security” means any Eligible Asset (i) owned solely by CME in its individual capacity and (ii) which CME has the unrestricted right to pledge as security for the Obligations, free and clear of any Lien (other than any Lien created pursuant to this Agreement or permitted by Section 7.8 of the Credit Agreement).

“Company Securities Account” means each Citibank Company Securities Account and each Other Company Securities Account.

“Control Agreement” means the Bank of China Securities Account Control Agreement, BBH Securities Account Control Agreement, BMO Securities Account Control Agreement, BNP Securities Account Control Agreement, BNY Mellon Securities Account Control Agreement, Citibank Securities Account Control Agreement, JPMorgan Securities Account Control Agreement, Lakeside Bank Securities Account Control Agreement, each Other Securities Account Control Agreement, each Money Fund Control Agreement, each FX Account Control Agreement, each Other Deposit Account Control Agreement and each Clearing Member Customer Gold Warrant Advance Deposit Account Control Agreement.

“Custodian” means Bank of China Securities Intermediary, BBH Securities Intermediary, BMO Securities Intermediary, BNP Securities Intermediary, BNY Mellon Securities Intermediary, Citibank Securities Intermediary, JPMorgan Securities Intermediary, Lakeside Bank Securities Intermediary, any Money Fund Issuer (or its transferring or servicing agent), any Applicable Other Securities Intermediary, any FX Account Bank, any Bullion Account Bank, any Applicable Other Depository, any Clearing Member Customer Gold Warrant Advance Depository and (with respect to any Gold Warrant and Clearing Member Customer Gold Warrant) the applicable Gold Warrant Issuer.

“Delayed Attachment Collateral” has the meaning set forth in Section 2.1(b).

“Deposit Account” means a “deposit account” as defined in Section 9-102(a)(29) of the UCC.

“Deposit Account Control” means “control” of the Deposit Account in accordance with Section 9-104 of the UCC.

“Deposit Account Instructions” means, with respect to any deposit account, instructions directing disposition of any Cash in such deposit account.

“Entitlement Holder” has the meaning given in Section 8-102(a)(7) of the UCC.

“Entitlement Order” has the meaning given in Section 8-102(a)(8) of the UCC.

“Fed” means the Federal Reserve Bank of New York.

“Federal Book-Entry Regulations” means (a) the federal regulations contained in Subpart B (“Treasury/Reserve Automated Debt Entry System (TRADES)” governing Book-Entry Securities consisting of U.S. Treasury bonds, notes and bills) and, to the extent related thereto, Subpart D (“Additional Provisions”) of 31 C.F.R. Part 357, 31 C.F.R. § 357.10 through § 357.15 and § 357.40 through § 357.45 (including related defined terms in 31 C.F.R. § 357.2), each as in effect from time to time; and (b) to the extent substantially identical to the federal regulations referred to in clause (a) above (as in effect from time to time), the federal regulations governing other Book-Entry Securities.

“Fed Member” means any Person that is eligible to maintain (and that maintains) with the Fed one or more Fed Member Securities Accounts in such Person’s name.

“Fed Member Securities Account” means, in respect of any Person, an account in the name of such Person at the Fed, to which account Book-Entry Securities held for such Person are or may be credited.

“Financial Asset” means “financial asset” as defined in Section 8-102(a)(9) of the UCC.

“FX Account Bank” means the JPMorgan FX Account Bank and any Other FX Account Bank and **“FX Account Banks”** means each of the foregoing.

“FX Account Collateral” means the JPMorgan FX Account Collateral and any Other FX Account Collateral.

“FX Account Control Agreement” means any of the JPMorgan FX Account Control Agreement and any Other FX Account Control Agreement and **“FX Account Control Agreements”** means each of the foregoing.

“FX Security Agreement” means any of the JPMorgan FX Security Agreement and any Other FX Security Agreement and **“FX Security Agreements”** means each of the foregoing.

“FX Triggering Event” means, with respect to any JPMorgan Clearing Member Customer FX Account, a JPMorgan FX Triggering Event, and with respect to any Other Clearing Member Customer FX Account, an Applicable Other Triggering Event with respect to such Other Clearing Member Customer FX Account.

“Gold Bullion” means any gold bullion in which a security interest has been granted in favor of the Collateral Agent under any Bullion Security Agreement.

“Gold Bullion Clearing Member” means each Clearing Members set forth on Schedule XXXIX hereto.

“Gold Bullion Collateral” has the meaning set forth in Section 4.10.

“Gold Warrant” means an electronic document of title (within the meaning of Section 1-201(b)(16) of the UCC) issued by a Gold Warrants Issuer identified therein that (i) identifies the gold covered thereby in the manner set forth on Schedule XXVIII hereto (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent) and (ii) is issued to the Collateral Agent.

“Gold Warrants Issuer” means with respect to any Gold Warrant or Clearing Member Customer Gold Warrant, the bailee that (a) possesses the gold covered by such Gold Warrant or Clearing Member Customer Gold Warrant, as applicable, (b) has issued such Gold Warrant or Clearing Member Customer Gold Warrant, as applicable, and (c) is an entity set forth on Schedule XXXV hereto (as such Schedule may be updated from time to time (to the extent such update is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent).

“Gold Warrant Collateral Documents” has the meaning set forth in Section 2.2(c).

“Guaranty Fund Assets” means any assets deposited by Clearing Members to satisfy their guaranty fund obligations as required by the CME Rules.

“IEF2 Program” means the program under which shares of money market mutual funds are deposited with the Clearing House by Clearing Members participating in the IEF2TM Program to satisfy such Clearing Members’ obligations to the Clearing House pursuant to CME Rules 816, 817 and 820, NYMEX Rules 816, 817 and 820, CBOT Rules 816, 817 and 820 and any similar Rule.

“Instruction” means “instruction” as defined in Section 8-102(a)(12) of the UCC.

“Investment Property” means “investment property” as defined in Section 9-102(a)(49) of the UCC.

“Joinder Agreement” has the meaning set forth in Section 8.13.

“JPMorgan Bullion Account” means the allocated gold accounts identified on Schedule XXI hereto opened or to be opened in the name of CME (and any sub-accounts and replacement or substituted accounts thereto or therefore) held with the JPMorgan Bullion Account Bank to the credit of which Gold Bullion will from time to time be deposited “Loco London”.

“JPMorgan Bullion Account Bank” means JPMorgan Chase Bank N.A.

“JPMorgan Bullion Security Agreement” means the Bullion Security Agreement, between the applicable Grantors, the Collateral Agent and the Collateral Monitoring Agent, in a form reasonably acceptable to the Collateral Agent, the Administrative Agent and CME, relating to gold bullion maintained in gold bullion accounts at the JPMorgan Bullion Account Bank, as the same may be amended, supplemented, restated or modified from time to time in accordance therewith.

“JPMorgan Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule XV hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XV (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgment by the Collateral Agent), in each case as established and maintained with the JPMorgan Securities Intermediary in accordance with Section 3.1(d).

“JPMorgan Clearing Member Customer FX Account” means each of the deposit accounts listed on Schedule XXIII hereto (including after giving effect to any deposit accounts added or removed from Schedule XXIII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the JPMorgan FX Account Bank in accordance with Section 3.1(k).

“JPMorgan Clearing Member FX Account” means each of the deposit accounts listed on Schedule XXIV hereto (including after giving effect to any deposit accounts added or removed from Schedule XXIV (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the JPMorgan FX Account Bank in accordance with Section 3.1(k).

“JPMorgan Collateral Securities Account” means each of the Securities Accounts listed on Schedule XVI hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XVI (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the JPMorgan Securities Intermediary in accordance with Section 3.1(d).

“JPMorgan FX Account Bank” means JPMorgan Chase Bank, N.A., London branch.

“JPMorgan FX Account Collateral” means all Cash and other property held in or credited to each JPMorgan Clearing Member FX Account or JPMorgan Clearing Member Customer FX Account.

“JPMorgan FX Account Control Agreement” means one or more Deposit Account Control Agreements by and among the applicable Grantors, the JPMorgan FX Account Bank, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“JPMorgan FX Security Agreement” means the Charge Over Accounts (Clearing Members’ Collateral Accounts) between the applicable Grantors, the Collateral Agent and the Collateral Monitoring Agent, in a form reasonably acceptable to the Collateral Agent, the Administrative Agent and CME, relating to JPMorgan FX Account Collateral maintained in or credited to deposit accounts at the JPMorgan FX Account Bank, as the same may be amended, supplemented, restated or modified from time to time in accordance therewith.

“JPMorgan FX Triggering Event” means the time at which all of the following have occurred: (a) any JPMorgan Clearing Member Customer FX Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“JPMorgan Securities Account” means each JPMorgan Clearing Member Customer Collateral Account and JPMorgan Collateral Securities Account.

“JPMorgan Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the JPMorgan Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“JPMorgan Securities Account Triggering Event” means the time at which all of the following have occurred: (a) any JPMorgan Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“JPMorgan Securities Intermediary” means JPMorgan Chase Bank, N.A., acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“Lakeside Bank Clearing Member Customer Collateral Account” means each of the Securities Accounts listed on Schedule XVII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XVII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Lakeside Bank Securities Intermediary in accordance with Section 3.1(i).

“Lakeside Bank Collateral Securities Account” means each of the Securities Accounts listed on Schedule XVIII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XVIII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Lakeside Bank Securities Intermediary in accordance with Section 3.1(i).

“Lakeside Bank Securities Account” means each Lakeside Bank Clearing Member Customer Collateral Account and Lakeside Bank Collateral Securities Account.

“Lakeside Bank Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, the Lakeside Bank Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Lakeside Bank Securities Intermediary” means Lakeside Bank, acting solely in its capacity as a “securities intermediary” as defined in Section 8-102(a)(14) of the UCC and, in respect of any Book-Entry Security, in its capacity as a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“Lakeside Bank Triggering Event” means the time at which all of the following have occurred: (a) any Lakeside Bank Clearing Member Customer Collateral Account is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“Money Fund Control Agreement” means any control agreement by and among the applicable Grantors, any Money Fund Issuer or its transfer or servicing agent, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Administrative Agent and the

Collateral Agent, as the same may be amended, restated, supplemented or otherwise modified from time to time in accordance herewith.

“Money Fund Issuer” means each issuer of a money market fund approved for the IEF2 Program, including, without limitation, in any event, those issuers listed on Schedule I hereto (including after giving effect to any money market fund added to or removed from Schedule I (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and written acknowledgement by the Collateral Agent).

“Money Fund Shares” means the Clearing Member Money Fund Shares.

“Money Fund Triggering Event” means, with respect to any Clearing Member Money Fund Shares, the time at which all of the following have occurred: (a) the Clearing Member Money Fund Shares and the Money Fund Issuer of such Clearing Member Money Fund Shares are identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“Notice of Exclusive Control” means a notice from the Collateral Agent to the Bank of China Securities Intermediary given pursuant to the Bank of China Securities Account Control Agreement (and substantially in the form required by the Bank of China Securities Account Control Agreement), a notice from the Collateral Agent to the BBH Securities Intermediary given pursuant to the BBH Securities Account Control Agreement (and substantially in the form required by the BBH Securities Account Control Agreement), a notice from the Collateral Agent to the BMO Securities Intermediary given pursuant to the BMO Securities Account Control Agreement (and substantially in the form required by the BMO Securities Account Control Agreement), a notice from the Collateral Agent to the BNP Securities Intermediary given pursuant to the BNP Securities Account Control Agreement (and substantially in the form required by the BNP Securities Account Control Agreement), a notice from the Collateral Agent to the BNY Mellon Securities Intermediary given pursuant to the BNY Mellon Securities Account Control Agreement (and substantially in the form required by the BNY Mellon Securities Account Control Agreement), a notice from the Collateral Agent to the Citibank Securities Intermediary given pursuant to the Citibank Securities Account Control Agreement (and substantially in the form required by the Citibank Securities Account Control Agreement), a notice from the Collateral Agent to the JPMorgan Securities Intermediary given pursuant to the JPMorgan Securities Account Control Agreement (and substantially in the form required by the JPMorgan Securities Account Control Agreement), a notice from the Collateral Agent to the Lakeside Bank Securities Intermediary given pursuant to the Lakeside Bank Securities Account Control Agreement (and substantially in the form required by the Lakeside Bank Securities Account Control Agreement), a notice from the Collateral Agent to the Applicable Other Securities Intermediary given pursuant to the applicable Other Securities Account Control Agreement (and substantially in the form required by the applicable Other Securities Account Control Agreement), a notice from the Collateral Agent to any Money Fund Issuer or its transfer or servicing agent pursuant to any Money Fund Control Agreement (and substantially in the form required by such Money Fund Control Agreement), a notice from the Collateral Agent to the applicable FX Account Bank given pursuant to a FX Account Control Agreement (and substantially in the form required by such FX Account Control Agreement) or a notice from the Collateral Agent to the Applicable Other Depository given pursuant to the applicable Other Deposit Account Control Agreement (and substantially in the form required by the applicable Other Deposit Account Control Agreement) directing the Bank of China Securities Intermediary, BBH Securities Intermediary, BMO Securities Intermediary, BNP Securities Intermediary, BNY Mellon Securities Intermediary, Citibank Securities Intermediary, JPMorgan Securities Intermediary, Lakeside Bank Securities Intermediary, the Applicable Other Securities Intermediary, such Money Fund Issuer or its

transfer or servicing agent, the applicable FX Account Bank or the Applicable Other Depository, as the case may be, to cease following the direction of the Grantors and to only follow the direction of the Collateral Agent with respect to the Collateral subject to the applicable Control Agreement.

“Other Bullion Accounts” means the allocated gold accounts identified on Schedule XXIX hereto (including after giving effect to any Bullion Accounts added to or removed from Schedule XXIX (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent) opened or to be opened in the name of CME (and any sub-accounts and replacement or substituted accounts thereto or therefor) held with any Other Bullion Account Bank to the credit of which Gold Bullion will from time to time be deposited.

“Other Bullion Account Bank” means, with respect to any Other Bullion Account, the Person identified in Schedule XXX hereto (including after giving effect to any Bullion Accounts added to or removed from Schedule XXX (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), as the Other Bullion Account Bank for such Other Bullion Account.

“Other Bullion Security Agreements” means one or more bullion security agreements by and among the applicable Grantors, any applicable Other Bullion Account Bank, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Other Clearing Member Collateral Deposit Account” means each of the Deposit Accounts listed on Schedule XXVI hereto (including after giving effect to any Deposit Accounts added to or removed from Schedule XXVI (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Applicable Other Depository in accordance with Section 3.1(l).

“Other Clearing Member Customer Collateral Deposit Account” means each of the Deposit Accounts listed on Schedule XXV hereto (including after giving effect to any Deposit Accounts added to or removed from Schedule XXV (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Applicable Other Depository in accordance with Section 3.1(l).

“Other Clearing Member Customer Collateral Securities Account” means each of the Securities Accounts listed on Schedule XIX hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XIX (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Applicable Other Securities Intermediary in accordance with Section 3.1(j).

“Other Clearing Member Collateral Securities Account” means each of the Securities Accounts listed on Schedule XX hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XX (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Applicable Other Securities Intermediary in accordance with Section 3.1(j)

“Other Clearing Member Customer FX Account” means each of the deposit accounts listed on Schedule XXXI hereto (including after giving effect to any deposit accounts added to or removed from Schedule XXXI (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the applicable Other FX Account Bank in accordance with Section 3.1(k).

“Other Clearing Member FX Account” means each of the deposit accounts listed on Schedule XXXII hereto (including after giving effect to any deposit accounts added to or removed from Schedule XXXII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the applicable Other FX Account Bank in accordance with Section 3.1(k).

“Other Company Deposit Account” means each of the Deposit Accounts listed on Schedule XXVII hereto (including after giving effect to any Deposit Accounts added to or removed from Schedule XXVII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Applicable Other Depository in accordance with Section 3.1(l).

“Other Company Securities Account” means each of the Securities Accounts listed on Schedule XXXIII hereto (including after giving effect to any Securities Accounts added to or removed from Schedule XXXIII (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), in each case as established and maintained with the Applicable Other Securities Intermediary in accordance with Section 3.1(j).

“Other FX Account Bank” means, with respect to any Other Clearing Member Customer FX Account or Other Clearing Member FX Account, the Person identified in Schedule XXXIV hereto (including after giving effect to any other Clearing Member Customer FX Accounts or other Clearing Member FX Accounts added to or removed from Schedule XXXIV (to the extent such addition or removal is permitted by the Loan Documents) after the date hereof following written notice to and acknowledgement by the Collateral Agent), as the Other FX Account Bank for such Other Clearing Member Customer FX Account or Other Clearing Member FX Account.

“Other FX Account Collateral” means all Cash and other property held in or credited to each Other Clearing Member Customer FX Account or Other Clearing Member FX Account.

“Other FX Account Control Agreement” means one or more Deposit Account Control Agreements by and among the applicable Grantors, the applicable Other FX Account Bank, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Other FX Account Security Agreement” means one or more security agreements between the applicable Grantors, the Collateral Agent and the Collateral Monitoring Agent, in a form reasonably acceptable to the Collateral Agent, the Administrative Agent and CME, relating to the applicable Other FX Account Collateral maintained in or credited to deposit accounts at the applicable Other FX Account Bank, as the same may be amended, supplemented, restated or modified from time to time accordance therewith.

“Other Grantor Secured Obligations” means (i) with respect to the Collateral Agent’s security interest in any Collateral constituting Guaranty Fund Assets owned by any Grantor other than CME, the Obligations and (ii) with respect to the Collateral Agent’s security interest in any Collateral owned by any Grantor other than CME, which Collateral does not constitute Guaranty Fund Assets, all unpaid principal

of, and accrued and unpaid interest on, the Loans (including, without limitation, interest accruing after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding, relating to CME, whether or not a claim or such interest is allowed in such proceeding).

“Other Deposit Account” means each Other Clearing Member Customer Collateral Deposit Account, Other Clearing Member Collateral Deposit Account and Other Company Deposit Account.

“Other Deposit Account Collateral” means all Cash and other property held in or credited to each Other Deposit Account.

“Other Deposit Account Control Agreement” means one or more Deposit Account Control Agreements by and among the applicable Grantors, any Applicable Other Depository, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Other Securities Account” means each Other Clearing Member Customer Collateral Securities Account, Other Clearing Member Collateral Securities Account and Other Company Securities Account.

“Other Securities Account Control Agreement” means one or more Securities Account Control Agreements by and among the applicable Grantors, any Applicable Other Securities Intermediary, the Collateral Agent and the Collateral Monitoring Agent, in such form as shall be reasonably satisfactory to the Collateral Agent and the Administrative Agent, as the same may from time to time be amended, supplemented, restated or modified in accordance therewith.

“Other Triggering Event” means the time at which all of the following have occurred: (a) any Other Clearing Member Customer Collateral Securities Account, Other Clearing Member Customer Collateral Deposit Account or Other Clearing Member Customer FX Account, as the case may be, is identified by CME in a Collateral Notice delivered pursuant to Section 3.1(a) of the Credit Agreement, (b) such Collateral Notice has been delivered in connection with an Advance Request, and (c) the Administrative Agent has made the Advance (requested in such Advance Request) to CME pursuant to Section 3.1(b)(iii) of the Credit Agreement, by initiating a federal wire transfer to the account identified by CME in such Advance Request.

“Proceeds” means “proceeds” as such term is defined in Section UCC 9-102(a)(64) of the UCC.

“PPSA” means the Personal Security Act (Ontario) as in effect from time to time.

“Secured Obligations” means (i) with respect to the Collateral Agent’s security interest in any Collateral owned by CME, the Obligations, and (ii) with respect to the Collateral Agent’s security interest in any Collateral owned by any Grantor other than CME, the Other Grantor Secured Obligations.

“Securities Account” means any “securities account” as defined in Section 8-501(a) of the UCC.

“Securities Control” means “control” as defined in Section 8-106 of the UCC.

“Securities Intermediary” means a Person that is a “securities intermediary” (as defined in Section 8-102(a)(14) of the UCC) and, in respect of any Book-Entry Security, a “securities intermediary” (as defined in 31 C.F.R. § 357.2 or, as applicable to such Book-Entry Security, the corresponding Federal Book-Entry Regulations).

“**Security Entitlement**” means a “security entitlement” as defined in Section 8-102(a)(17) of the UCC.

“**Triggering Event**” means each of the Bank of China Triggering Event, BBH Triggering Event, BMO Triggering Event, BNP Triggering Event, BNY Mellon Triggering Event, the Citibank Triggering Event, JPMorgan FX Triggering Event, JPMorgan Securities Account Triggering Event, Lakeside Bank Triggering Event, the Other Triggering Event and each Money Fund Triggering Event.

“**UCC**” means the Uniform Commercial Code as in effect from time to time in the State of New York.

1.2 **Interpretive Provisions.** The rules of interpretation set forth in Section 1.2 of the Credit Agreement are hereby incorporated by reference.

ARTICLE II GRANT OF SECURITY INTERESTS

2.1 **Pledge, Grant of Security Interest.** (a) Each Grantor hereunder hereby assigns, pledges and transfers to the Collateral Agent (for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks) and grants to the Collateral Agent (for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks) a security interest in and continuing lien on all of such Grantor’s right, title and interest in, to and under the following, in each case, whether now owned or existing or hereafter acquired or arising, and wherever located (all of which being hereinafter collectively called the “**Closing Date Collateral**”):

- (i) each Clearing Member Collateral Securities Account;
- (ii) all Security Entitlements carried in each Clearing Member Collateral Securities Account;
- (iii) all Financial Assets credited to each Clearing Member Collateral Securities Account;
- (iv) all Investment Property credited to each Clearing Member Collateral Securities Account;
- (v) each Clearing Member FX Account;
- (vi) all FX Account Collateral held in or credited to each Clearing Member FX Account;
- (vii) each Company Securities Account;
- (viii) all Security Entitlements carried in each Company Securities Account;
- (ix) all Financial Assets credited to each Company Securities Account;
- (x) all Investment Property credited to each Company Securities Account;
- (xi) each Other Clearing Member Collateral Deposit Account;

(xii) all Other Deposit Account Collateral held in or credited to each Other Clearing Member Collateral Deposit Account;

(xiii) each Other Company Deposit Account;

(xiv) all Other Deposit Account Collateral held in or credited to each Other Company Deposit Account;

(xv) all Gold Warrants and all gold covered by such Gold Warrants;

(xvi) each Clearing Member Customer Gold Warrant Advance Deposit Account;

(xvii) all Clearing Member Customer Gold Warrant Advance Deposit Account Collateral held in or credited to each Clearing Member Customer Gold Warrant Advance Deposit Account; and

(xviii) all Proceeds of any or all of the foregoing.

(b) Each Grantor hereunder hereby assigns, pledges and transfers to the Collateral Agent (for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks) and grants to the Collateral Agent (for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks) a security interest in and continuing lien on all of such Grantor's right, title and interest in, to and under the following, in each case, whether owned or existing or thereafter acquired or arising, and wherever located (all of which being hereinafter collectively called the "Delayed Attachment Collateral" and together with the "Closing Date Collateral", the "Collateral"):

(i) each Bank of China Clearing Member Customer Collateral Account, all Security Entitlements carried in each Bank of China Clearing Member Customer Collateral Account, all Financial Assets credited to each Bank of China Clearing Member Customer Collateral Account, all Investment Property credited to each Bank of China Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the "Bank of China Clearing Member Customer Collateral");

(ii) each BBH Clearing Member Customer Collateral Account, all Security Entitlements carried in each BBH Clearing Member Customer Collateral Account, all Financial Assets credited to each BBH Clearing Member Customer Collateral Account, all Investment Property credited to each BBH Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the "BBH Clearing Member Customer Collateral");

(iii) each BMO Clearing Member Customer Collateral Account, all Security Entitlements carried in each BMO Clearing Member Customer Collateral Account, all Financial Assets credited to each BMO Clearing Member Customer Collateral Account, all Investment Property credited to each BMO Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the "BMO Clearing Member Customer Collateral");

(iv) each BNP Clearing Member Customer Collateral Account, all Security Entitlements carried in each BNP Clearing Member Customer Collateral Account, all Financial Assets credited to each BNP Clearing Member Customer Collateral Account, all Investment Property credited to each BNP Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the "BNP Clearing Member Customer Collateral");

(v) each BNY Mellon Clearing Member Customer Collateral Account, all Security Entitlements carried in each BNY Mellon Clearing Member Customer Collateral Account, all Financial Assets credited to each BNY Mellon Clearing Member Customer Collateral Account, all Investment Property credited to each BNY Mellon Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the “**BNY Mellon Clearing Member Customer Collateral**”);

(vi) each Citibank Clearing Member Customer Collateral Account, all Security Entitlements carried in each Citibank Clearing Member Customer Collateral Account, all Financial Assets credited to each Citibank Clearing Member Customer Collateral Account, all Investment Property credited to each Citibank Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the “**Citibank Clearing Member Customer Collateral**”);

(vii) each JPMorgan Clearing Member Customer Collateral Account, all Security Entitlements carried in each JPMorgan Clearing Member Customer Collateral Account, all Financial Assets credited to each JPMorgan Clearing Member Customer Collateral Account, all Investment Property credited to each JPMorgan Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the “**JPMorgan Clearing Member Customer Collateral**”);

(viii) each Lakeside Bank Clearing Member Customer Collateral Account, all Security Entitlements carried in each Lakeside Bank Clearing Member Customer Collateral Account, all Financial Assets credited to each Lakeside Bank Clearing Member Customer Collateral Account, all Investment Property credited to each Lakeside Bank Clearing Member Customer Collateral Account and all Proceeds of any and all of the foregoing (the “**Lakeside Bank Clearing Member Customer Collateral**”);

(ix) each Other Clearing Member Customer Collateral Securities Account, all Security Entitlements carried in each Other Clearing Member Customer Collateral Securities Account, all Financial Assets credited to each Other Clearing Member Customer Collateral Securities Account, all Investment Property credited to each Other Clearing Member Customer Collateral Securities Account and all Proceeds of any and all of the foregoing (the “**Other Clearing Member Customer Securities Collateral**”);

(x) all Clearing Member Money Fund Shares and all Proceeds of any and all of the foregoing (the “**Clearing Member Money Fund Collateral**”);

(xi) each Clearing Member Customer FX Account, all FX Account Collateral held in or credited to each Clearing Member Customer FX Account and all Proceeds of any and all of the foregoing (the “**Clearing Member Customer FX Collateral**”); and

(xii) each Other Clearing Member Customer Collateral Deposit Account, all Other Deposit Account Collateral held in or credited to each Other Clearing Member Customer Collateral Deposit Account and all Proceeds of any and all of the foregoing (the “**Other Clearing Member Customer Deposit Collateral**”);

provided, however, for purposes of Section 9-203(a) of the UCC, the security interest granted pursuant to this Section 2.1(b) with respect to (x) any particular Clearing Member Customer Collateral Account and any Security Entitlements, Financial Assets and Investment Property credited to such account and any Proceeds thereof and (y) any particular Clearing Member Customer FX Account and any FX Account Collateral held in or credited to such account and any Proceeds thereof, shall not attach (A) with

respect to any such Bank of China Clearing Member Customer Collateral, until a Bank of China Triggering Event has occurred with respect to such Bank of China Clearing Member Customer Collateral Account, (B) with respect to any such BBH Clearing Member Customer Collateral, until a BBH Triggering Event has occurred with respect to such BBH Clearing Member Customer Collateral Account, (C) with respect to any such BMO Clearing Member Customer Collateral, until a BMO Triggering Event has occurred with respect to such BMO Clearing Member Customer Collateral Account, (D) with respect to any such BNP Clearing Member Customer Collateral, until a BNP Triggering Event has occurred with respect to such BNP Clearing Member Customer Collateral Account, (E) with respect to any such BNY Mellon Clearing Member Customer Collateral, until a BNY Mellon Triggering Event has occurred with respect to such BNY Mellon Clearing Member Customer Collateral Account, (F) with respect to any such Citibank Clearing Member Customer Collateral, until a Citibank Triggering Event has occurred with respect to such Citibank Clearing Member Customer Collateral Account, (G) with respect to any such JPMorgan Clearing Member Customer Collateral, until a JPMorgan Securities Account Triggering Event has occurred with respect to such JPMorgan Clearing Member Customer Collateral Account, (H) with respect to any such Lakeside Bank Clearing Member Customer Collateral, until a Lakeside Bank Triggering Event has occurred with respect to such Lakeside Bank Clearing Member Customer Collateral Account, (I) with respect to any such Other Clearing Member Customer Securities Collateral, until an Applicable Other Triggering Event has occurred with respect to such Other Clearing Member Customer Collateral Securities Account, (J) with respect to any Clearing Member Customer FX Collateral, until a FX Triggering Event has occurred with respect to such Clearing Member Customer FX Account and (K) with respect to any such Other Clearing Member Customer Deposit Collateral, until an Applicable Other Triggering Event has occurred with respect to such Other Clearing Member Customer Collateral Deposit Account;

provided, further, for purposes of Section 9-203(a) of the UCC, the security interest granted pursuant to this Section 2.1(b) with respect to any Clearing Member Money Fund Shares and any Proceeds of such Clearing Member Money Fund Shares shall not attach to any particular Clearing Member Money Fund Shares or any Proceeds thereof until a Money Fund Triggering Event has occurred from such Money Fund Shares being identified in a Collateral Notice.

(c) Upon the request of CME, the Administrative Agent and Collateral Agent shall deliver to CME a release notice substantially in the form of Exhibit B hereto (a “Release Notice”) when the following conditions have been satisfied:

(A) with respect to any Clearing Member Customer Collateral Account, there are no assets maintained in such Clearing Member Customer Collateral Account as a result of a withdrawal or transfer of assets permitted by the Loan Documents;

(B) with respect to any Clearing Member Customer FX Account, there is no FX Account Collateral held in or credited to such Clearing Member Customer FX Account as a result of a withdrawal or transfer of assets permitted by the Loan Documents;

(C) with respect to any Clearing Member Money Fund Shares, such Clearing Member Money Fund Shares have been retitled back into the name under which they were held prior to the attachment of the lien of the Collateral Agent described above as a result of a transfer of such shares permitted by the Loan Documents; and

(D) in each case, there are no outstanding Advances relating to such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, Clearing Member Money Fund Shares or Gold Warrants (whether such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, Clearing Member Money

Fund Shares or Gold Warrants were initially identified in a Collateral Notice as Collateral to be associated with an Advance or otherwise); and

(E) in each case, no Default or Unmatured Default exists.

In the Release Notice, the Collateral Agent shall identify the applicable Clearing Member Customer Collateral Account, Clearing Member Customer FX Account or Clearing Member Money Fund Shares and state that the security interest in such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account or Clearing Member Money Fund Shares is released. In addition, such Release Notice shall contain a grant of a security interest by the Grantors in such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account or Clearing Member Money Fund Shares which will not attach except as provided in Section 2.1(b). Upon the execution and delivery of a Release Notice by the Administrative Agent and the Collateral Agent to CME and the acknowledgment and agreement thereto by CME, the security interest pursuant to Section 2.1(a) or Section 2.1(b), as applicable, in such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account or Clearing Member Money Fund Shares listed in such Release Notice shall be automatically released, subject to the immediately preceding sentence. Nothing contained herein shall prevent any security interest granted to the Collateral Agent in any Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, or Clearing Member Money Fund Shares from attaching pursuant to Section 2.1(b) to such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, or Clearing Member Money Fund Shares if a Triggering Event occurs with respect to such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, or Clearing Member Money Fund Shares after the execution and delivery by the parties thereto of a Release Notice relating to such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, or Clearing Member Money Fund Shares.

(d) The security interests granted by CME pursuant to Sections 2.1(a) and 2.1(b) secure the prompt and complete payment and performance in full of all Obligations. The security interests granted by the Grantors other than CME pursuant to Sections 2.1(a) and 2.1(b) secure the prompt and complete payment and performance in full of all Other Grantor Secured Obligations.

2.2 Control Agreements; Control; Transfer of Collateral. (a) To the extent required by Section 5.2 of the Credit Agreement, all Money Fund Shares and each of the Bank of China Securities Accounts, each of the BBH Securities Accounts, each of the BMO Securities Accounts, each of the BNP Securities Accounts, each of the BNY Mellon Securities Accounts, each of the Citibank Securities Accounts, each of the JPMorgan Securities Accounts, each of the Lakeside Bank Securities Accounts, each of the Other Securities Accounts, each of the Clearing Member Customer FX Accounts, each of the Clearing Member FX Accounts, each of the Clearing Member Customer Gold Warrant Advance Deposit Accounts and each of the Other Deposit Accounts shall be subject to a Control Agreement.

(b) [Reserved].

(c) To the extent that any Gold Warrant is included in the Collateral Pool, the applicable Grantors shall take all actions required under applicable law and any applicable system for transferring interests in Gold Warrants to establish that such Gold Warrant is issued to the Collateral Agent and that the Collateral Agent has control of such Gold Warrant (and confirmation by the applicable Gold Warrants Issuer and the applicable keeper of the transfer recordation system for such Gold Warrant that such Gold Warrant is issued to the Collateral Agent), and, to the extent the Administrative Agent determines that the relevant Clearing Member is or may be deemed to be “located” in a jurisdiction outside of the United States for the purposes of the applicable UCC, the relevant Grantors shall take any actions required by applicable foreign law to perfect the lien of the Collateral Agent in such Gold Warrant and the gold

covered by such Gold Warrant (any such documents entered into in connection with the foregoing, together with any financing statements filed in connection with Gold Warrants, "Gold Warrant Collateral Documents").

ARTICLE III
MAINTENANCE OF THE COLLATERAL ACCOUNTS; MONEY FUND
SHARES; GOLD WARRANTS

3.1 Establishment of Securities Accounts and Deposit Accounts; Control of Money Fund Shares; Control of Gold Warrants.

(a) CME may establish the BNY Mellon Securities Accounts and, to the extent that such BNY Mellon Securities Accounts are included in the Collateral Pool, shall maintain such BNY Mellon Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the BNY Mellon Securities Accounts:

(i) The BNY Mellon Securities Intermediary shall cause each BNY Mellon Securities Account to be, and each BNY Mellon Securities Account shall be, separate from all other accounts (including any other BNY Mellon Securities Account) maintained by or at the direction of the BNY Mellon Securities Intermediary.

(ii) Upon the execution and delivery of the BNY Mellon Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each BNY Mellon Securities Account listed on the applicable schedules to such BNY Mellon Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the BNY Mellon Securities Account Control Agreement, instruct the BNY Mellon Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(b) CME may establish the Citibank Securities Accounts and, to the extent that such Citibank Securities Accounts are included in the Collateral Pool, shall maintain such Citibank Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the Citibank Securities Accounts:

(i) The Citibank Securities Intermediary shall cause each Citibank Securities Account to be, and each Citibank Securities Account shall be, separate from all other accounts (including any other Citibank Securities Account) maintained by or at the direction of the Citibank Securities Intermediary.

(ii) Upon the execution and delivery of the Citibank Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each Citibank Securities Account listed on the applicable schedules to such Citibank Securities Account Control Agreement and all Clearing Member Securities and other

Financial Assets held therein or credited thereto. CME shall, pursuant to the Citibank Securities Account Control Agreement, instruct the Citibank Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(c) To the extent that any Money Fund Shares are included in the Collateral Pool, upon the execution and delivery of each Money Fund Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Instructions with respect to, each Money Fund Share pledged by CME as Collateral and subject to such Money Fund Control Agreement. CME shall, pursuant to each applicable Money Fund Control Agreement, instruct each applicable Money Fund Issuer or its transfer or servicing agent, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Instructions originated by the Collateral Agent with respect to each such Money Fund Share without further consent of CME and (II) following receipt by such Money Fund Issuer or its transfer or servicing agent of a Notice of Exclusive Control, to comply with the Instructions of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Money Fund Share included in the Collateral Pool shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(d) CME may establish the JPMorgan Securities Accounts and, to the extent that such JPMorgan Securities Accounts are included in the Collateral Pool, shall maintain such JPMorgan Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the JPMorgan Securities Accounts:

(i) The JPMorgan Securities Intermediary shall cause each JPMorgan Securities Account to be, and each JPMorgan Securities Account shall be, separate from all other accounts (including any other JPMorgan Securities Account) maintained by or at the direction of the JPMorgan Securities Intermediary.

(ii) Upon the execution and delivery of the JPMorgan Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to each JPMorgan Securities Account listed on the applicable schedules to such JPMorgan Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the JPMorgan Securities Account Control Agreement, instruct the JPMorgan Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(e) CME may establish the BBH Securities Accounts and, to the extent that such BBH Securities Accounts are included in the Collateral Pool, shall maintain such BBH Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the BBH Securities Accounts:

(i) The BBH Securities Intermediary shall cause each BBH Securities Account to be, and each BBH Securities Account shall be, separate from all other accounts (including any other BBH Securities Account) maintained by or at the direction of the BBH Securities Intermediary.

(ii) Upon the execution and delivery of the BBH Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each BBH Securities Account listed on the applicable schedules to such BBH Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the BBH Securities Account Control Agreement, instruct the BBH Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(f) CME may establish the BMO Securities Accounts and, to the extent that such BMO Securities Accounts are included in the Collateral Pool, shall maintain such BMO Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the BMO Securities Accounts:

(i) The BMO Securities Intermediary shall cause each BMO Securities Account to be, and each BMO Securities Account shall be, separate from all other accounts (including any other BMO Securities Account) maintained by or at the direction of the BMO Securities Intermediary.

(ii) Upon the execution and delivery of the BMO Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each BMO Securities Account listed on the applicable schedules to such BMO Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the BMO Securities Account Control Agreement, instruct the BMO Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(g) CME may establish the BNP Securities Accounts and, to the extent that such BNP Securities Accounts are included in the Collateral Pool, shall maintain such BNP Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the BNP Securities Accounts:

(i) The BNP Securities Intermediary shall cause each BNP Securities Account to be, and each BNP Securities Account shall be, separate from all other accounts (including any other BNP Securities Account) maintained by or at the direction of the BNP Securities Intermediary.

(ii) Upon the execution and delivery of the BNP Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each BNP Securities Account listed on the applicable schedules to such BNP Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the BNP Securities Account Control Agreement, instruct the BNP Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(h) CME may establish the Bank of China Securities Accounts and, to the extent that such Bank of China Securities Accounts are included in the Collateral Pool, shall maintain such Bank of China Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the Bank of China Securities Accounts:

(i) The Bank of China Securities Intermediary shall cause each Bank of China Securities Account to be, and each Bank of China Securities Account shall be, separate from all other accounts (including any other Bank of China Securities Account) maintained by or at the direction of the Bank of China Securities Intermediary.

(ii) Upon the execution and delivery of the Bank of China Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each Bank of China Securities Account listed on the applicable schedules to such Bank of China Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the Bank of China Securities Account Control Agreement, instruct the Bank of China Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(i) CME may establish the Lakeside Bank Securities Accounts and, to the extent that such Lakeside Bank Securities Accounts are included in the Collateral Pool, shall maintain such Lakeside Bank Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the Lakeside Bank Securities Accounts:

(i) The Lakeside Bank Securities Intermediary shall cause each Lakeside Bank Securities Account to be, and each Lakeside Bank Securities Account shall be, separate from all other accounts (including any other Lakeside Bank Securities Account) maintained by or at the direction of the Lakeside Bank Securities Intermediary.

(ii) Upon the execution and delivery of the Lakeside Bank Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each Lakeside Bank Securities Account listed on the applicable schedules to such Lakeside Bank Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to the Lakeside Bank Securities Account Control Agreement, instruct the Lakeside Bank Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(j) CME may establish the Other Securities Accounts and, to the extent that such Other Securities Accounts are included in the Collateral Pool, shall maintain such Other Securities Accounts. The following provisions shall apply to the establishment and maintenance of each of the Other Securities Accounts:

(i) The Applicable Other Securities Intermediary shall cause each applicable Other Securities Account to be, and each Other Securities Account shall be, separate from all other accounts (including any other Other Securities Account) maintained by or at the direction of such Applicable Other Securities Intermediary.

(ii) Upon the execution and delivery of any Other Securities Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Securities Control over, and (B) the power to originate Entitlement Orders with respect to, each applicable Other Securities Account listed on the applicable schedules to such Other Securities Account Control Agreement and all Clearing Member Securities and other Financial Assets held therein or credited thereto. CME shall, pursuant to such Other Securities Account Control Agreement, instruct the Applicable Other Securities Intermediary, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Entitlement Orders originated by the Collateral Agent without further consent of CME and (II) following receipt by such Securities Intermediary of a Notice of Exclusive Control, to comply with the Entitlement Orders of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(k) CME may establish the Clearing Member Customer FX Accounts and, to the extent that such Clearing Member Customer FX Accounts are included in the Collateral Pool, shall maintain such Clearing Member Customer FX Accounts. The following provisions shall apply to the establishment and maintenance of each of the Clearing Member Customer FX Accounts and Clearing Member FX Accounts:

(i) The applicable FX Account Bank shall cause each such Clearing Member Customer FX Account and each such Clearing Member FX Account to be, and each such account shall be, separate from all other accounts maintained by or at the direction of such FX Account Bank.

(ii) Upon the execution and delivery of the applicable FX Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Deposit Account Control over, and (B) the power to originate Deposit Account Instructions with respect to each Clearing Member Customer FX Account or Clearing Member FX Account listed on the applicable schedules to such FX Account Control Agreement. CME shall, pursuant to the FX Account Control Agreement, instruct the applicable FX Account Bank, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Deposit Account Instructions originated by the Collateral Agent without further consent of CME and (II) following receipt by the applicable FX Account Bank of a Notice of Exclusive Control, to comply with the Deposit Account Instructions of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(l) CME may establish the Other Deposit Accounts and, to the extent that such Other Deposit Accounts are included in the Collateral Pool, shall maintain such Other Deposit Accounts. The following provisions shall apply to the establishment and maintenance of each of the Other Deposit Accounts:

(i) The Applicable Other Depository shall cause each applicable Other Deposit Account to be, and each Other Deposit Account shall be, separate from all other accounts (including any other Other Deposit Account) maintained by or at the direction of such Applicable Other Depository.

(ii) Upon the execution and delivery of any Other Deposit Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Deposit Account Control over, and (B) the power to originate Deposit Account Instructions with respect to, each applicable Other Deposit Account listed on the applicable schedules to such Other Deposit Account Control Agreement. CME shall, pursuant to such Other Deposit Account Control Agreement, instruct the Applicable Other Depository, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Deposit Account Instructions originated by the Collateral Agent without further consent of CME and (II) following receipt by such Applicable Other Depository of a Notice of Exclusive Control, to comply with the Deposit Account Instructions of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(iii) The jurisdiction of each Applicable Other Depository shall be located in the United States of America for the purposes of the UCC; and each Other Deposit Account shall be maintained at an office of the Applicable Other Depository which office is located in the United States of America.

(m) Upon the transfer of a Gold Warrant to the Collateral Agent and issuance of such Gold Warrant in the name of the Collateral Agent and confirmation by the applicable Gold Warrants Issuer and the applicable keeper of the transfer recordation system for such Gold Warrant that the Collateral Agent is the transferee of such Gold Warrant, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) control (pursuant to Section 7-106 of any applicable Uniform Commercial Code) of such Gold Warrant, and (B) the power to direct the transfer of and to take possession of all gold covered by such Gold Warrant. CME agrees, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all instructions originated by the Collateral Agent with respect to each such Gold Warrant and all gold covered by each such Gold Warrant without further consent of any other Person and (II) to comply with the instructions of no Person other than a Person authorized (and only to the extent authorized) by the Collateral Agent. No Gold Warrants or gold included in the Collateral Pool shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

(n) CME may establish the Clearing Member Customer Gold Warrant Advance Deposit Accounts and, to the extent that such Clearing Member Customer Gold Warrant Advance Deposit Accounts are included in the Collateral Pool, shall maintain such Clearing Member Customer Gold Warrant Advance Deposit Accounts. The following provisions shall apply to the establishment and maintenance of each of the Clearing Member Customer Gold Warrant Advance Deposit Accounts:

(i) The Clearing Member Customer Gold Warrant Advance Depository shall cause each applicable Clearing Member Customer Gold Warrant Advance Deposit Account to be, and each Clearing Member Customer Gold Warrant Advance Deposit Account shall be, separate from all other accounts (including any other Clearing Member Customer Gold Warrant Advance Deposit Account) maintained by or at the direction of the Clearing Member Customer Gold Warrant Advance Depository.

(ii) Upon the execution and delivery of any Clearing Member Customer Gold Warrant Advance Deposit Account Control Agreement, the Collateral Agent shall, in accordance with and subject to all applicable requirements of law, have (A) Deposit Account Control over, and (B) the power to originate Deposit Account Instructions with respect to, each applicable Clearing Member Customer Gold Warrant Advance Deposit Account listed on the applicable schedules to such Clearing Member Customer Gold Warrant Advance Deposit Account Control Agreement. CME shall, pursuant to such Clearing Member Customer Gold Warrant Advance Deposit Account Control Agreement, instruct the Clearing Member Customer Gold Warrant Advance Depository, notwithstanding any other term or condition to the contrary in any other agreement, (I) to comply with all Deposit Account Instructions originated by the Collateral Agent without further consent of CME and (II) to comply with the Deposit Account Instructions of no other Person other than a Person authorized (and to the extent authorized) by the Collateral Agent. To the extent any Clearing Member Customer Gold Warrant is identified in a Collateral Notice and (x) such Clearing Member Customer Gold Warrant has been issued to the Collateral Agent and constitutes a Gold Warrant, (y) CME has replaced, withdrawn, transferred or liquidated the Clearing Member Customer Gold Warrant Advance Deposit Account Collateral identified in such Collateral Notice as associated with such Clearing Member Customer Gold Warrant in accordance with the Loan Documents or (z) the Clearing Member Customer Gold Warrant Advance (and accrued and unpaid interest

thereon) initially secured by the Collateral in such Collateral Notice has been paid in full, the Collateral Agent's security interest in such Clearing Member Customer Gold Warrant Advance Deposit Account and any Clearing Member Customer Gold Warrant Advance Deposit Collateral held in or credited to such Clearing Member Customer Gold Warrant Advance Deposit Account pursuant to Section 2.1(a) shall be automatically released, the Collateral Agent shall no longer have Deposit Account Control over and power to originate Deposit Account Instructions with respect to such Clearing Member Customer Gold Warrant Advance Deposit Account, and CME shall have full power to originate Deposit Account Instructions with respect to such Clearing Member Customer Gold Warrant Advance Deposit Account. No Collateral shall be released to or for the account of, or withdrawn or transferred by or for the account of CME or any other Person except as expressly permitted in this Agreement or as expressly permitted in the Credit Agreement.

3.2 Investments. Amounts credited to the Bank of China Securities Accounts, the BBH Securities Accounts, the BMO Securities Accounts, the BNP Securities Accounts, the BNY Mellon Securities Accounts, the Citibank Securities Accounts, the JPMorgan Securities Accounts, the Lakeside Bank Securities Accounts and the Other Securities Accounts in the form of cash shall be invested from time to time in such investments as CME shall determine (or, if a Default has occurred and is continuing, as the Administrative Agent may determine), which investments shall be of the types described in CME Rules 816, 817 and 820, NYMEX Rules 816, 817 and 820, CBOT Rules 816, 817 and 820 and any similar Rules, as applicable.

3.3 Voting Rights; Dividends and Distributions. So long as no Default shall have occurred and be continuing:

(a) Voting Rights. Each applicable Grantor shall be entitled to exercise any and all voting and other consensual rights pertaining to the Collateral or any part thereof for any purposes not inconsistent with the terms of this Agreement.

(b) Dividends and Distributions. The Grantors and the Collateral Agent agree that all cash, distributions, dividends, additional securities and any and all other property or Proceeds received, distributed in respect of or in exchange for any Collateral pledged by any Grantor hereunder shall be credited to the applicable Bank of China Securities Account, BBH Securities Account, BMO Securities Account, BNP Securities Account, BNY Mellon Securities Account, Citibank Securities Account, JPMorgan Securities Account, the Lakeside Bank Securities Account, Other Securities Account, Clearing Member Customer FX Account, Clearing Member FX Account or Other Deposit Account and covered by the security interest granted to the Collateral Agent hereunder.

3.4 Successor Accounts. In the event a successor account to any Bank of China Securities Account, any BBH Securities Account, any BMO Securities Account, any BNP Securities Account, any BNY Mellon Securities Account, any Citibank Securities Account, any JPMorgan Securities Account, any Lakeside Bank Securities Account, any Other Securities Account, any Clearing Member Customer FX Account or any Clearing Member FX Account is established, such account shall be established with the existing Securities Intermediary (or (x) in the case of any Clearing Member Customer FX Account or Clearing Member FX Account, with such FX Account Bank or (y) in the case of any Other Deposit Account, with the Applicable Other Depository) for such account or another Securities Intermediary in accordance with the definitions of the terms "BNY Mellon Clearing Member Customer Collateral Account", "BNY Mellon Collateral Securities Account", "Citibank Clearing Member Customer Collateral Account", "Citibank Collateral Securities Account", "Citibank Company Securities Account", "JPMorgan Clearing Member Customer Collateral Account", "JPMorgan Collateral Securities Account", "BBH Clearing Member Customer Collateral Account", "BBH Collateral Securities Account", "BMO Clearing Member Customer Collateral Account", "BMO Collateral Securities Account", "Bank of China Clearing Member

Customer Collateral Account”, “Bank of China Collateral Securities Account”, “Other Clearing Member Customer Collateral Securities Account”, “Other Collateral Securities Account”, “Lakeside Bank Clearing Member Customer Collateral Account”, “Lakeside Bank Collateral Securities Account”, “BNP Clearing Member Customer Collateral Account”, “BNP Collateral Securities Account”, “Clearing Member Customer FX Account”, “Clearing Member FX Account”, “Other Clearing Member Customer Collateral Deposit Account”, “Other Clearing Member Collateral Deposit Account” or “Other Company Deposit Account” as applicable.

ARTICLE IV REPRESENTATIONS AND WARRANTIES

Each Grantor hereby represents and warrants to the Collateral Agent (except that with respect to Section 4.8 below, CME (and not any other Grantor) represents and warrants to the Collateral Agent), which representations and warranties shall survive execution and delivery of this Agreement, as follows:

4.1 [Reserved].

4.2 Validity, Perfection and Priority. The security interests granted to the Collateral Agent hereunder constitute (or, in the case of Delayed Attachment Collateral, will constitute as of the occurrence of the applicable Triggering Event) valid security interests in the Collateral in favor of the Collateral Agent for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks. Upon the execution and delivery of each applicable Control Agreement, the security interests granted to the Collateral Agent hereunder shall be valid, perfected, first-priority security interests in the Closing Date Collateral in favor of the Collateral Agent for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks. Upon (a) the execution and delivery of each applicable Control Agreement and (b) the occurrence of the applicable Triggering Event, the security interests granted to the Collateral Agent hereunder shall be valid, perfected, first-priority security interests in the respective Delayed Attachment Collateral in favor of the Collateral Agent for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks.

4.3 No Liens.

(a) Except for the Lien granted to the Collateral Agent hereunder, or as otherwise permitted under Section 7.8 of the Credit Agreement, each item of the Collateral pledged by such Grantor is (and in the case of the Delayed Attachment Collateral, will be as of the occurrence of the applicable Triggering Event) free and clear of any and all Liens, rights or claims of all other Persons.

(b) Except for the filing of financing statements filed with respect to the Liens granted by this Agreement, no financing statement or other evidence of any Lien covering or purporting to cover any of the Collateral pledged by any Grantor is on file or recorded in any public office.

4.4 Organization. Such Grantor is duly incorporated, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has all requisite authority to conduct its business in each jurisdiction in which its business is conducted and where the failure to have such authority would reasonably be expected to have a Material Adverse Effect.

4.5 Power and Authority; Authorization; Enforceability. Such Grantor has (and as of the occurrence of any Triggering Event, will have) the power and authority (corporate or otherwise) and legal right to execute and deliver this Agreement and to perform its obligations hereunder and each Grantor other than CME has granted to CME, pursuant to CME Rules 816, 817 and 820, NYMEX Rules 816, 817 and 820, CBOT Rules 816, 817 and 820 and any other similar applicable Rule, the power to execute and deliver

this Agreement and the Control Agreements on such Grantor's behalf as Member Attorney-in-Fact. Each Grantor's entering into this Agreement and the performance of its obligations hereunder has been duly authorized by proper proceedings (corporate or otherwise). This Agreement constitutes each Grantor's legal, valid and binding obligation, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency or similar laws affecting the enforcement of creditors' rights generally and by general principles of equity (whether enforcement is considered in a proceeding at law or in equity).

4.6 No Conflict. Neither the execution or delivery, nor compliance by such Grantor with the provisions hereof, (i) will violate any law, rule, regulation, order, writ, judgment, injunction, decree or award binding on such Grantor's articles of incorporation, bylaws or other governing documents, or (ii) will violate the provisions of any material indenture, instrument or agreement to which such Grantor is a party or is subject, or by which such Grantor or such Grantor's property is bound, or conflict with, or constitute a default thereunder, or result in the creation or imposition of any Lien (except pursuant to this Agreement) upon any of the property or assets of such Grantor pursuant to the terms of any such indenture, instrument or agreement.

4.7 Grantors In Good Standing with Clearing House. As of the date hereof, each Grantor (other than CME in its individual capacity) is a Clearing Member in good standing with the Clearing House under the Rules.

4.8 Corporate Name and Jurisdiction of Organization. The legal name of CME is "Chicago Mercantile Exchange Inc." and its jurisdiction of organization is the State of Delaware.

4.9 Money Fund Shares. Each Grantor other than CME has granted to CME, pursuant to the Rules, the power and authority to pledge the Money Fund Shares on such Grantor's behalf as Member Attorney-in-Fact as security for the payment and performance in full of the Secured Obligations.

4.10 Gold Bullion Collateral.

(a) Notwithstanding that any Clearing Member has executed this Agreement, (i) CME owns all legal and beneficial right, title and interest in and to the Gold Bullion, the Bullion Account and any and all rights, proceeds and property whatsoever in connection with or arising out of the Gold Bullion or any Bullion Account (collectively with the Gold Bullion and any Bullion Account, the "**Gold Bullion Collateral**") (except with respect to Liens permitted under Section 7.8 of the Credit Agreement) and (ii) no Clearing Member other than CME or one of the Gold Bullion Clearing Members has, or at any time hereafter (prior to such time as the Secured Obligations (other than unasserted contingent indemnification obligations not due and payable) have been paid and performed in full and the Aggregate Commitments have expired or been terminated) shall have, any right, title or interest (including any lien, charge or security interest) in or to any Gold Bullion Collateral.

(b) Gold Bullion shall be included in the Collateral Pool only if (i) such Gold Bullion consists of gold bullion made available to CME by one or more Gold Bullion Clearing Members in satisfaction of performance bond requirements pursuant to the Rules, (ii) such Gold Bullion is contained in a bullion account subject to a Bullion Security Agreement, (iii) CME and each such Gold Bullion Clearing Member is a party to such Bullion Security Agreement, and (iv) no Clearing Member (other than a Gold Bullion Clearing Member party to a Bullion Security Agreement) has any right, title or interest in or to such Gold Bullion.

4.11 Gold Warrants Collateral. A Gold Warrant shall be included in the Collateral Pool only if (i) such Gold Warrant constitutes an electronic document of title under the UCC and (ii) such Gold Warrant and any and all rights, proceeds and property whatsoever in connection with or arising out of such Gold

Warrant or any gold covered by such Gold Warrant (except with respect to Liens permitted under Section 7.8 of the Credit Agreement) are owned by CME or one of the Clearing Members set forth on Schedule XXXVII hereto and are in respect of gold warrants previously transferred to CME in satisfaction of performance bond requirements pursuant to the Rules.

4.12 Clearing Member Customer Gold Warrant Collateral. A Clearing Member Customer Gold Warrant shall be identified in a Collateral Notice only if (i) such Clearing Member Customer Gold Warrant constitutes an electronic document of title under the UCC, (ii) such Clearing Member Customer Gold Warrant and any and all rights, proceeds and property whatsoever in connection with or arising out of such Clearing Member Customer Gold Warrant or any gold covered by such Clearing Member Customer Gold Warrant (except with respect to Liens permitted under Section 7.8 of the Credit Agreement) are owned by CME or one of the Clearing Members set forth on Schedule XXXVII hereto and are in respect of gold warrants previously transferred to CME in satisfaction of performance bond requirements pursuant to the Rules, (iii) upon registration of such gold warrant in the name of the Collateral Agent such gold warrant shall constitute a “Gold Warrant” and satisfy Section 4.11 and (iv) Section 5.2(m) of the Credit Agreement has been satisfied.

ARTICLE V COVENANTS

Each Grantor covenants and agrees with the Collateral Agent, and with respect to Sections 5.6 and 5.7, the Collateral Agent agrees with each Grantor, that from and after the date of this Agreement, so long as any Obligations (other than unasserted contingent indemnification obligations not due and payable) are outstanding and until the Credit Agreement has been terminated:

5.1 Further Assurances. At any time and from time to time, upon the reasonable request of the Collateral Agent, and at the sole expense of such Grantor, such Grantor shall (i) execute and deliver any and all such further instruments, endorsements, powers of attorney and other documents, make such filings, give such notices, (ii) to the extent CME is required to pledge additional Collateral to cure a Borrower Base deficiency, the Clearing Members, acting through CME as Member Attorney-in-Fact for the Clearing Members shall cooperate with CME to effect such pledge and (iii) take such further action as the Administrative Agent may deem desirable in obtaining the full benefits of this Agreement and of the rights, remedies and powers herein granted, including, without limitation, the following:

(a) file any financing statements, in form reasonably acceptable to the Administrative Agent under the Uniform Commercial Code in effect in any jurisdiction with respect to the Liens and security interests granted hereby. Such Grantor also hereby authorizes the Administrative Agent, the Collateral Agent and their agents and attorneys to file any such financing statement without the signature of such Grantor to the extent permitted by applicable law; and

(b) furnish to the Collateral Agent from time to time statements and schedules further identifying and describing the Collateral and such other reports in connection with the Collateral as the Collateral Agent may reasonably request, all in reasonable detail and in form reasonably satisfactory to the Administrative Agent.

For the avoidance of doubt, nothing herein shall require the Collateral Agent to file financing statements or continuation statements, or be responsible for maintaining the security interests purported to be created as described herein (except for the safe custody of any Collateral in its possession and the accounting for moneys actually received by it hereunder or under any other Loan Document).

5.2 Compliance with Laws. Such Grantor will comply with all laws, rules, regulations, orders, writs, judgments, injunctions, decrees or awards to which it may be subject, except where the failure to so comply would not reasonably be expected to have a Material Adverse Effect.

5.3 Payment of Obligations. Such Grantor will pay when due all taxes, assessments and governmental charges and levies upon the Collateral pledged by such Grantor or in respect of any income, profits or property or profits therefrom, except those (i) which are being contested in good faith by appropriate proceedings and with respect to which adequate reserves have been set aside in accordance with GAAP on the books of such Grantor and (ii) as to which the failure to pay would not reasonably be expected to have a Material Adverse Effect.

5.4 Security Interest; Validity. Such Grantor will not assert the invalidity of the security interest of the Collateral Agent in the Collateral or the invalidity or unenforceability of any Collateral Document.

5.5 Negative Pledge. Such Grantor will not create, incur or permit to exist, any Lien or claim on or to the Collateral (other than the Liens created hereunder and the other Collateral Documents or as otherwise permitted under Section 7.8 of the Credit Agreement), and such Grantor will defend the right, title and interest of the Collateral Agent in and to any of such Collateral against the claims and demands of all Persons whomsoever, in each case, at such Grantor's expense.

5.6 Performance by Collateral Agent of Grantor's Obligations; Reimbursement. If any Grantor fails to perform or comply with any of its agreements contained herein, the Collateral Agent may, but shall not be under any obligation to, without notice to or consent by any Grantor and without obligation, perform or comply or cause performance or compliance therewith and the reasonable costs and expenses of the Collateral Agent incurred in connection with such performance or compliance shall be payable by the Grantors to the Collateral Agent on demand and such reimbursement obligation shall be secured as a Secured Obligation hereby.

5.7 Notice of Exclusive Control/Triggering Event. The Collateral Agent agrees that it will not deliver a Notice of Exclusive Control under Section 7.2 with respect to any Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, or any Clearing Member Money Fund Shares unless the Collateral Agent has been notified in writing by the Administrative Agent that a Triggering Event has occurred with respect to such Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, or Clearing Member Money Fund Shares. The Collateral Agent shall not be deemed to have knowledge that any Triggering Event has occurred unless and until notice describing such Triggering Event is given in writing to the Collateral Agent by the Administrative Agent.

ARTICLE VI POWER OF ATTORNEY

6.1 Collateral Agent's Appointment as Attorney-in-Fact.

(a) Each Grantor hereby irrevocably constitutes and appoints the Collateral Agent and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full irrevocable power and authority in the place and stead of such Grantor and in the name of any Grantor, or in its own name, from time to time in the Collateral Agent's discretion, for the purpose of carrying out the terms of this Agreement, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary to accomplish the purposes of this Agreement and each Control Agreement, such power and authority to be exercisable solely in accordance with Section 7.1. Without

limitation, each Grantor hereby gives the Collateral Agent the power and right, without notice to or assent by any Grantor, to do the following, subject to and in accordance with Section 7.1:

(1) in the case of any Collateral now or hereafter pledged by any Grantor hereunder, to (A) receive, take possession of and indorse and collect any checks, drafts, notes, acceptances or other instruments for the payment of moneys due under, or with respect to, or distributed in respect of any such Collateral, (B) direct any issuer of or any party liable for any payment under any of the Collateral now or hereafter pledged by such Grantor hereunder to make payment of any and all moneys due or to become due thereunder directly to the Collateral Agent or as the Collateral Agent shall direct and (C) ask or demand for, collect, receive payment of and receipt for, any and all moneys, claims and other amounts due or to become due at any time in respect of or arising out of any Collateral now or hereafter pledged by such Grantor hereunder;

(2) at such Grantor's expense, to (A) commence and prosecute any suits, actions or proceedings at law or in equity in any court of competent jurisdiction to collect the Collateral now or hereafter pledged by such Grantor hereunder, and to enforce any other right in respect of any such Collateral, (B) defend any suit, action or proceeding brought against such Grantor with respect to any Collateral now or hereafter pledged hereunder, (C) settle, compromise or adjust any suit, action or proceeding described in the preceding clause and, in connection therewith, to give such discharges or releases as the Administrative Agent may deem appropriate and (D) generally, sell or transfer and make any agreement with respect to or otherwise deal with any of the Collateral pledged hereunder as fully and completely as though the Administrative Agent were the absolute owner thereof for all purposes, and do, at the Administrative Agent's option, at any time, or from time to time, all acts and things which the Administrative Agent deems necessary to protect, preserve or realize upon the Collateral now or hereafter pledged hereunder and the Liens of the Collateral Agent thereon and to effect the intent of this Agreement, all as fully and effectively as such Grantor might do; and

(3) at any time and from time to time, to execute, in connection with any foreclosure, any indorsements, assignments or other instruments of conveyance or transfer with respect to the Collateral now or hereafter pledged hereunder.

Each Grantor hereby ratifies all that said attorneys shall lawfully do or cause to be done by virtue hereof. This power of attorney is a power coupled with an interest and shall be irrevocable.

Each Grantor hereby acknowledges and agrees that in acting pursuant to this power-of-attorney, the Collateral Agent shall be acting in its own interest, that the Collateral Agent shall have no fiduciary duties to any Grantor and that each Grantor hereby waives any claims to the rights of a beneficiary of a fiduciary relationship hereunder.

(b) No Duty on the Part of Collateral Agent. Subject to the provisions of Article X and Section 11.8 of the Credit Agreement, the powers conferred on the Collateral Agent hereunder are solely to protect the interests of the Collateral Agent in the Collateral and shall not impose any duty upon the Collateral Agent to exercise any such powers. The Collateral Agent shall be accountable only for amounts that it actually receives as a result of the exercise of such powers, and neither it nor any of its officers, directors, employees or agents shall be responsible to any Grantor for any act or failure to act hereunder, except as is found in a final and non-appealable judgment to have resulted from the Collateral Agent's bad faith, gross negligence or willful misconduct.

(c) Incorporation by Reference of Certain Provisions of the Credit Agreement. The provisions of Article X and Section 11.8 of the Credit Agreement, insofar as such provisions pertain to the Collateral Agent, shall be deemed incorporated herein by reference, mutatis mutandis, for the benefit of the Collateral Agent.

ARTICLE VII PAYMENTS; REMEDIES; RIGHTS UPON DEFAULT

7.1 Rights and Remedies Generally. In accordance with Section 9.1 of the Credit Agreement, at any time after which the Secured Obligations have become due and payable and the obligations of the Banks to make Loans have terminated, then, in every such case, the Collateral Agent shall have all the rights of a secured party under the UCC, shall have all rights now or hereafter existing under all other applicable laws, and, subject to any mandatory requirements of applicable law then in effect, shall have all the rights set forth in this Agreement and all the rights set forth with respect to the Collateral in this Agreement and in all other Loan Documents including without limitation, the right to exercise the power of attorney set forth in Section 6.1(a). No enumeration of rights in this Article or elsewhere in this Agreement or in any other Loan Document shall be deemed to in any way limit the rights of the Collateral Agent as described in this Section.

7.2 Notice of Exclusive Control; Liquidation of Collateral. (a) (i) Upon delivery by CME of any Collateral Notice pursuant to Section 3.1(a) of the Credit Agreement in which CME identifies Collateral held in any applicable Bank of China Securities Account, any applicable BBH Securities Account, any applicable BMO Securities Account, any applicable BNY Mellon Securities Account, any applicable Citibank Securities Account, any applicable BNP Securities Account, any applicable JPMorgan Securities Account, any applicable Lakeside Bank Securities Account, any applicable Other Securities Account, any applicable Money Fund Share, any applicable Clearing Member Customer FX Account, any applicable Clearing Member FX Account, any applicable Other Deposit Account or any applicable Gold Warrants as being pledged to secure an Advance, (ii) in the event that CME pledges additional Collateral in the form of any Money Fund Share or Collateral held in any applicable Bank of China Securities Account, any applicable BBH Securities Account, any applicable BMO Securities Account, any applicable BNP Securities Account, any applicable BNY Mellon Securities Account, any applicable Citibank Securities Account, any applicable JPMorgan Securities Account, any applicable Lakeside Bank Securities Account, any applicable Other Securities Account, any applicable Clearing Member Customer FX Account, any applicable Clearing Member FX Account or any applicable Other Deposit Account in accordance with Section 2.6 of the Credit Agreement in order to cure a Borrowing Base deficiency, or (iii) at any other time, with the consent of CME, the Collateral Agent may (A) immediately with respect to the Closing Date Collateral (other than any Clearing Member Customer Gold Warrant Deposit Account or any Clearing Member Customer Gold Warrant Deposit Account Collateral), or (B) upon the occurrence of the applicable Triggering Event with respect to the respective Delayed Attachment Collateral, (1) deliver a Notice of Exclusive Control to the Bank of China Securities Intermediary in accordance with the Bank of China Securities Account Control Agreement with respect to each such Bank of China Securities Account identified by CME, the BBH Securities Intermediary in accordance with the BBH Securities Account Control Agreement with respect to each such BBH Securities Account identified by CME, the BMO Securities Intermediary in accordance with the BMO Securities Account Control Agreement with respect to each such BMO Securities Account as identified by CME, the BNP Securities Intermediary in accordance with the BNP Securities Account Control Agreement with respect to each such BNP Securities Account as identified by CME, the BNY Mellon Securities Intermediary in accordance with the BNY Mellon Securities Account Control Agreement with respect to each such BNY Mellon Securities Account identified by CME, the Citibank Securities Intermediary in accordance with the Citibank Securities Account Control Agreement with respect to each such Citibank Securities Account identified by CME, the Lakeside Bank Securities Intermediary in accordance with the Lakeside Bank Securities Account Control Agreement with

respect to each such Lakeside Bank Securities Account identified by CME, the JPMorgan Securities Intermediary in accordance with the JPMorgan Securities Account Control Agreement with respect to each such JPMorgan Securities Account identified by CME, the Applicable Other Securities Intermediary in accordance with the Other Securities Account Control Agreement with respect to each such Other Securities Account as identified by CME, the applicable Money Fund Issuer or its transfer or servicing agent in accordance with the Money Fund Control Agreement with respect to each such Money Fund Share identified by CME, the FX Account Bank in accordance with the FX Account Control Agreement with respect to each such Clearing Member Customer FX Account or Clearing Member FX Account identified by CME, or the Applicable Other Depositary in accordance with the Other Deposit Account Control Agreement with respect to each such Other Deposit Account as identified by CME or (2) deliver transfer instructions to the applicable Gold Warrants Issuer and the applicable keeper of the transfer recordation system with respect to any Gold Warrant in accordance with the Gold Warrant Collateral Documents with respect to such Gold Warrant identified by CME; provided that, notwithstanding anything herein or in any other Loan Document to the contrary, (x) CME shall be permitted to replace, withdraw, transfer or liquidate any Clearing Member Security or any Company Security, as applicable, from each such Bank of China Securities Account, each such BBH Securities Account, each such BMO Securities Account, each such BNP Securities Account, each such Lakeside Bank Securities Account, each such BNY Mellon Securities Account, each such Citibank Securities Account, each such JPMorgan Securities Account, each such Other Securities Account, any Money Fund Shares, any FX Account Collateral held in or credited to any Clearing Member Customer FX Account or Clearing Member FX Account, any Other Deposit Collateral held in or credited to any Other Deposit Account, any Clearing Member Customer Gold Warrant Advance Deposit Account Collateral held in or credited to any Clearing Member Customer Gold Warrant Advance Deposit Account and any Gold Warrants in accordance with Sections 2.9(b), (c) or (d) of the Credit Agreement and (y) upon any such replacement, withdrawal, transfer or liquidation in accordance with Sections 2.9(b), (c) or (d) of the Credit Agreement, the Lien of the Collateral Agent on the replaced, withdrawn, transferred or liquidated Clearing Member Security, Company Security, Money Fund Shares, FX Account Collateral, Other Deposit Collateral, Clearing Member Customer Gold Warrant Advance Deposit Account Collateral or Gold Warrants, as the case may be, shall be deemed released without further consent of the Collateral Agent or any Bank in accordance with Section 2.9(e) of the Credit Agreement. With respect to any Collateral, the Collateral Agent shall rescind any Notice of Exclusive Control which it has delivered with respect to any applicable Custodian hereunder following payment in full of all outstanding Advances and accrued and unpaid interest thereon. With respect to any Collateral identified in a Collateral Notice, so long as no Default or Unmatured Default exists, the Collateral Agent shall rescind any Notice of Exclusive Control which it has delivered with respect to any applicable Custodian hereunder following payment in full of the outstanding Advance (and accrued and unpaid interest thereon) identified as being secured by such Collateral in such Collateral Notice.

(b) At any time after which the Secured Obligations have become due and payable, and at the direction of the Administrative Agent acting in accordance with Section 9.1 of the Credit Agreement, the Collateral Agent may liquidate any Clearing Member Security, any Company Security, any Money Fund Shares, any FX Account Collateral or any Gold Warrants and shall apply the proceeds thereof (or, in the case of (x) any Other Deposit Account or Other Deposit Account Collateral, apply such Other Deposit Account Collateral and (y) any Clearing Member Customer Gold Warrant Advance Deposit Account or Clearing Member Customer Gold Warrant Advance Deposit Account Collateral, apply such Clearing Member Customer Gold Warrant Advance Deposit Account Collateral) to the Secured Obligations (whether matured or unmatured) in such order as set forth in Section 7.5 below; provided that upon any such liquidation and application, the Lien of the Collateral Agent on the liquidated Clearing Member Security, Company Security, Money Fund Shares, FX Account Collateral Gold Warrants, Clearing Member Customer Gold Warrant Advance Deposit Account Collateral or on such Other Deposit Account Collateral, as the case may be, shall be deemed released without further consent of the Collateral Agent or any Bank in accordance with Section 2.9(e) of the Credit Agreement.

7.3 Recourse. CME shall remain liable for any deficiency if the proceeds of any sale or other disposition of the Collateral are insufficient to satisfy the Secured Obligations.

7.4 Expenses. CME shall reimburse the Collateral Agent for all of its reasonable costs and expenses in accordance with Section 11.8 of the Credit Agreement.

7.5 Application of Proceeds. The proceeds of any disposition, liquidation or redemption of Collateral shall be applied to the Secured Obligations as follows:

(a) to the extent constituting Secured Obligations, to the payment of any and all expenses and fees (including attorneys' fees and disbursements) incurred by the Collateral Agent in connection with the exercise of its rights and remedies hereunder, including without limitation, expenses and fees in connection with preparing for sale and disposing of or otherwise liquidating or redeeming Collateral;

(b) to the satisfaction of the Secured Obligations, pro rata among the Applicable Tranches (and pro rata among the Secured Obligations under each such Applicable Tranche), in the following order: first, to accrued and unpaid fees owing under the Credit Agreement; second, to accrued and unpaid interest on the Loans; third, to outstanding principal on the Loans (in chronological order in accordance with the dates such Loans were made); and fourth, to all other accrued and unpaid Secured Obligations; provided that, if at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, interest and fees then due hereunder, such funds shall be applied first, towards payment of all Secured Obligations in respect of Swingline Loans; second, towards payment of interest and fees then due in respect of Revolving Loans (in accordance with the Collateral Pool), ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties; and third, towards payment of principal then due in respect of Revolving Loans, ratably among the parties entitled thereto in accordance with the amounts of principal then due to such parties;

(c) to the extent constituting Secured Obligations, to the payment of any other amount required to be paid by the Collateral Agent by law; and

(d) upon termination of this Agreement, to the applicable Grantor, or to whomsoever may lawfully be entitled to receive the same, or as a court of competent jurisdiction may direct.

7.6 Limitation on Duties Regarding Preservation of Collateral.

(a) The Collateral Agent shall have no obligation to take any steps to preserve rights against any of the parties to any Collateral.

(b) Subject to Article X and Section 11.8 of the Credit Agreement, neither the Collateral Agent nor any of its directors, officers, employees or agents shall be liable for failure to demand, collect or realize upon all or any part of the Collateral or for any delay in doing so or shall be under any obligation to sell or otherwise dispose of any Collateral upon the request of any Grantor or otherwise.

7.7 Waiver of Claims. EACH GRANTOR HEREBY WAIVES, TO THE EXTENT PERMITTED BY APPLICABLE LAW, NOTICE AND JUDICIAL HEARING IN CONNECTION WITH THE DISPOSITION BY THE COLLATERAL AGENT OF ANY OF THE COLLATERAL, INCLUDING, WITHOUT LIMITATION, ANY AND ALL PRIOR NOTICE AND HEARING FOR ANY PREJUDGMENT REMEDY OR REMEDIES, and each Grantor hereby further waives, to the extent permitted by law:

(a) all other requirements as to the time, place and terms of sale or other requirements with respect to the enforcement of the rights of the Collateral Agent hereunder;

(b) demand of performance or other demand, notice of intent to demand or accelerate, notice of acceleration presentment, protest, advertisement or notice of any kind to or upon any Grantor or any other Person; and

(c) all rights of redemption, appraisalment, valuation, diligence, stay, extension or moratorium now or hereafter in force under any applicable law in order to hinder or delay the enforcement of this Agreement or the absolute sale of the Collateral or any portion thereof; and each Grantor, in each case both for itself and for all who may claim under it, insofar as it or they now or hereafter lawfully may, hereby waives the benefit of all such laws.

7.8 Discontinuance of Proceedings. In case the Collateral Agent shall have instituted any proceeding to enforce any right, power or remedy under this Agreement by foreclosure, sale, entry or otherwise, and such proceeding shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Collateral Agent, then and in every such case each Grantor, on the one hand, and the Collateral Agent, on the other hand, shall be returned to their former positions and rights hereunder with respect to the Collateral subject to the security interest created under this Agreement, and all rights, remedies and powers of the Collateral Agent shall continue as if no such proceeding had been instituted.

ARTICLE VIII MISCELLANEOUS

8.1 Governing Law; Submission to Jurisdiction.

(a) **THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.**

(b) Each Grantor hereby irrevocably submits to the non-exclusive jurisdiction of any United States federal or New York state court sitting in New York, New York in any action or proceedings arising out of or relating to any Loan Documents and each Grantor hereby irrevocably agrees that all claims in respect of such action or proceeding may be heard and determined in any such court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement shall affect any right that the Collateral Agent may otherwise have to bring any action or proceeding relating to this Agreement against any Grantor or its properties in the courts of any jurisdiction. Each party irrevocably consents to service of process in the manner provided for notices in Section 13.1 of the Credit Agreement. Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by law.

8.2 Limitation of Liability. To the extent permitted by applicable law, no Grantor shall assert, and each Grantor hereby waives, any claim against the Administrative Agent or the Banks on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement or any agreement or instrument contemplated hereby, or the use of the proceeds thereof.

8.3 Notices. Except as otherwise expressly provided herein, all notices, requests and demands to or upon the respective parties hereto to be effective shall be given in the manner provided in, and deemed

delivered as described in, and to the applicable notice addresses as described in, Section 13.1 of the Credit Agreement.

8.4 Successors and Assigns. This Agreement shall be binding upon each Grantor and their respective successors and assigns and shall inure to the benefit of each Grantor and the Collateral Agent and all holders of the Obligations and their respective successors and assigns.

8.5 Waivers and Amendments. None of the terms or provisions of this Agreement may be waived, amended, supplemented or otherwise modified except (i) in accordance with Section 9.2 of the Credit Agreement or (ii) by a written instrument executed by each Grantor and the Collateral Agent (with the consent of the Required Banks (except that such consent of the Required Banks shall not be required in connection with a Joinder Agreement executed and delivered pursuant to Section 8.13 hereof or to make any change to the schedules to this Agreement)). Any such amendment, supplement, modification or waiver shall be binding upon each Grantor and the Collateral Agent and all holders of the Secured Obligations. In the case of any waiver, each Grantor and the Collateral Agent shall be restored to their former position and rights hereunder and under the outstanding Secured Obligations, and any Unmatured Default or Default waived shall be deemed to be cured and not continuing, but no such waiver shall extend to any subsequent or other Default or Unmatured Default, or impair any right consequent thereon.

8.6 No Waiver; Remedies Cumulative. No failure or delay on the part of the Collateral Agent in exercising any right, power or privilege hereunder and no course of dealing between any Grantor and the Collateral Agent shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege. A waiver by the Collateral Agent of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy which the Collateral Agent would otherwise have on any future occasion. The rights and remedies herein expressly provided are cumulative, may be exercised singly or concurrently and as often and in such order as the Collateral Agent deems expedient and are not exclusive of any rights or remedies which the Collateral Agent would otherwise have whether by agreement or now or hereafter existing under applicable law. No notice to or demand on any Grantor in any case shall entitle such Grantor to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the Collateral Agent to any other or further action in any circumstances without notice or demand.

8.7 Termination; Release. This Agreement shall create a continuing security interest in the Collateral (or, in the case of Delayed Attachment Collateral, will create such a continuing security interest as of the occurrence of the applicable Triggering Event) and shall remain in full force and effect until released in accordance with this Section 8.7. When the Secured Obligations (other than unasserted contingent indemnification obligations not due and payable) have been paid and performed in full and the Aggregate Commitments have expired or been terminated, this Agreement shall terminate. This Agreement may also be terminated by a written instrument executed each Grantor and the Collateral Agent (with the consent of all of the Banks). Upon any termination of this Agreement, at the request and sole expense of CME, the Collateral Agent will execute and deliver to CME the proper instruments (including UCC termination statements) acknowledging the termination of this Agreement, and will duly assign, transfer and deliver to each Grantor, without recourse, representation or warranty of any kind whatsoever, such of the Collateral pledged by such Grantor as may be in possession of the Collateral Agent and has not theretofore been disposed of, applied or released. Upon any replacement, liquidation, transfer or withdrawal of Collateral pursuant to subsection (b) or (c) of Section 2.9 of the Credit Agreement (other than a transfer of any such assets to a securities account or other account that is subject to the Lien of the Collateral Agent pursuant to the Loan Documents which has attached), the security interest of the Collateral Agent on the replaced, liquidated, transferred or withdrawn Collateral, as applicable, shall be automatically released without further consent of the Collateral Agent or any Bank. Upon delivery of a fully executed Release

Notice in accordance with Section 2.1(c) by the Administrative Agent and the Collateral Agent to CME, the security interest of the Collateral Agent in the assets specified in such notice will be automatically released without further consent of the Collateral Agent or any Bank; provided that each such Release Notice shall simultaneously grant a security interest in such assets which will not attach except as provided in Section 2.1(b). Notwithstanding anything to the contrary herein, with respect to any Grantor (other than CME), to the extent that (i) there are no Loans outstanding and no Secured Obligations are due and payable or (ii) there are Loans outstanding or Secured Obligations due and payable but (in each case under this clause (ii)) no Collateral of such Grantor is included in the Collateral Pool, if such Grantor ceases to be a Clearing Member then (x) such Grantor shall automatically cease to be a "Clearing Member" and a "Grantor" hereunder, (ii) such Grantor shall be automatically released from and terminated as a party to this Agreement and automatically released from all obligations hereunder, (iii) the Collateral Agent's lien hereunder in such Grantor's rights in the Collateral shall automatically be released and (iv) Schedule XXXVI attached hereto shall be automatically amended to remove the name of such Grantor, in each case, without further action of any Person. Upon the release of any security interest in the Collateral, the assets so released shall cease to constitute "Collateral" for purposes of this Agreement and all other Loan Documents. The Collateral Agent will, at CME's expense, authorize, execute and deliver such documents as CME may reasonably request to release such Person from its obligations under the Loan Documents.

8.8 Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one agreement, and any of the parties hereto may execute this Agreement by signing any such counterpart. Delivery of an executed signature page by facsimile or email shall be effective as delivery of a manually executed counterpart hereof.

8.9 Effectiveness. This Agreement shall become effective on the date on which it has been executed by each Grantor and the Collateral Agent.

8.10 Headings Descriptive. Section headings in this Agreement are for convenience of reference only, and shall not govern the interpretation of any of the provisions of this Agreement.

8.11 Severability. Any provision in or obligation under this Agreement or the Secured Obligations that is held to be inoperative, unenforceable, or invalid in any jurisdiction shall, as to that jurisdiction, be inoperative, unenforceable, or invalid without affecting the remaining provisions in that jurisdiction or the operation, enforceability, or validity of that provision in any other jurisdiction, and to this end the provisions of this Agreement are declared to be severable.

8.12 Powers Coupled with an Interest. All authorizations and agencies herein contained with respect to the Collateral are irrevocable and powers coupled with an interest (but shall lapse upon the termination of this Agreement).

8.13 Additional Grantors. Each Clearing Member that is required to become a party to this Agreement pursuant to Section 7.9 of the Credit Agreement shall become a Grantor for all purposes of this Agreement and shall be subject to the terms hereof upon execution and delivery by such Clearing Member of an agreement substantially in the form of Exhibit A hereto (a "Joinder Agreement"), including revised versions of each of the schedules to this Agreement, as applicable, setting forth all information required to be provided therein with respect to such Clearing Member.

8.14 WAIVER OF TRIAL BY JURY. TO THE EXTENT PERMITTED BY APPLICABLE LAW, EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ALL RIGHT OF TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ANY MATTER ARISING HEREUNDER OR THEREUNDER.

8.15 Reinstatement. The granting of a security interest in the Collateral (including any specified assets identified in any Collateral Notice as Collateral associated with any Advance) and the other provisions hereof shall continue to be effective or be reinstated, as the case may be, if at any time any payment of any of the Secured Obligations is rescinded or must otherwise be returned by the Collateral Agent, the Administrative Agent or any Bank or is repaid by the Collateral Agent, the Administrative Agent or any Bank in whole or in part in good faith settlement of a pending or threatened avoidance claim, whether upon the insolvency, bankruptcy or reorganization of any Grantor or otherwise, all as though such payment had not been made. The provisions of this Section 8.15 shall survive repayment of all of the Secured Obligations and the termination or expiration of this Agreement in any manner.

8.16 Conflicts. In the event that any Grantor or any Custodian executes a customer or similar agreement in connection with, or purporting to govern, any Clearing Member Collateral Securities Account, any Clearing Member Customer Collateral Securities Account, any Company Securities Account, any Clearing Member Customer FX Account, any Clearing Member FX Account, any Money Fund Share, any Other Clearing Member Collateral Deposit Account, any Other Clearing Member Customer Collateral Deposit Account, any Other Company Deposit Account or any Gold Warrants and there are terms and conditions therein or thereof which are inconsistent or conflict with this Agreement, any Control Agreement, any FX Security Agreement or any Gold Warrant Collateral Documents, then this Agreement (or the applicable Control Agreement, FX Security Agreement or Gold Warrant Collateral Document) shall govern. In the event of any conflict or inconsistency between the provisions of the Credit Agreement and this Agreement (other than Section 2.1 hereof), the provisions of the Credit Agreement shall govern and control.

[Signature pages not required to be attached to Consolidated Form Security and Pledge Agreement.]

FORM OF JOINDER

Reference is hereby made to the Security and Pledge Agreement dated as of November 2, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the “**Agreement**”), by and among the Grantors party thereto from time to time, Chicago Mercantile Exchange Inc., a Delaware corporation (“**CME**”), and Citibank, N.A. acting through its Agency and Trust Division, as collateral agent (in such capacity, the “**Collateral Agent**”). Capitalized terms used herein and not defined herein shall have the meanings given to them in the Agreement.

By its execution below, the undersigned [____], a [_____] (the “**New Grantor**”), agrees to become, and does hereby become, a “**Grantor**” under the Agreement and agrees to be bound by such Agreement as if originally a party thereto.

Without limiting the generality of the foregoing, the New Grantor hereby (i) grants to the Collateral Agent, for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks, a continuing security interest in any and all of its right, title and interest in and to the Closing Date Collateral, in each case, whether now owned or existing or hereafter acquired or arising, and wherever located and (ii) grants to the Collateral Agent, for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks, a continuing security interest in any and all of its right, title and interest in and to the Delayed Attachment Collateral, in each case, whether now owned or existing or hereafter acquired or arising, and wherever located; provided, however, for purposes of Section 9-203(a) of the UCC, the security interest granted pursuant to this Agreement shall not attach to any Delayed Attachment Collateral thereof except as provided in Section 2.1(b) of the Agreement. The security interest granted by the New Grantor pursuant to this Joinder secures the prompt and complete payment and performance in full of all Other Grantor Secured Obligations.

By its execution below, the New Grantor represents and warrants as to itself that all of the representations and warranties contained in Article IV of the Agreement applicable to a Grantor thereunder are true and correct in all respects as of the date hereof.

Schedule []¹ to the Agreement is hereby amended to add the name of the New Grantor thereto.

This Joinder shall be construed in accordance with and governed by the laws of the State of New York.

This Joinder may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Joinder by signing and delivering one or more counterparts. Delivery of an executed signature page by facsimile or email shall be effective as delivery of a manually executed counterpart hereof.

[Signature page follows.]

¹ To reference Clearing Member schedule

IN WITNESS WHEREOF, [____], has executed and delivered this Joinder to the Agreement as of this ____ day of _____, 20__.

[NAME OF CLEARING MEMBER]

By: **CHICAGO MERCANTILE EXCHANGE
INC., as Member Attorney-in-Fact**

By: _____
Name: _____
Title: _____

Address for Notices:

c/o Chicago Mercantile Exchange Inc.
20 South Wacker Drive
Chicago, Illinois 60606

Facsimile: (312) 930-3187

S.W.I.F.T.: XCMEUS4C

Email: [_____]

Attention: [_____]

Accepted and Agreed as of this
____ day of _____, 20__:

**CITIBANK, N.A., acting through its Agency
and Trust Division, as Collateral Agent**

By: **CITIBANK, N.A.**

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

**CITIBANK, N.A., acting through its Futures,
Clearing and Collateral Division, as Collateral Monitoring Agent**

By: _____
Name: _____
Title: _____

Amended Security and Pledge Agreement

FORM OF RELEASE NOTICE

[Date]

Chicago Mercantile Exchange Inc.
20 South Wacker Drive
Chicago, Illinois 60606
Attention: President CME Clearing
Telecopier: (312) 634-1592
Electronic Mail: sunil.cutinho@cmegroup.com

Re: Release Notice

Ladies and Gentlemen:

Reference is made to the Security and Pledge Agreement (the “**Security Agreement**”), dated as of November 2, 2017, among Chicago Mercantile Exchange Inc., a Delaware corporation (“**CME**”), the other Grantors party thereto from time to time, and Citibank, N.A. acting through its Agency and Trust Division, as collateral agent (together with its successors and assigns, in such capacity, the “**Collateral Agent**”), for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks party to the Credit Agreement. Terms used and not otherwise defined herein shall the meanings provided therefor in the Security Agreement. This notice constitutes a “Release Notice” as defined in the Security Agreement.

The security interest of the Collateral Agent in all of the following property is hereby automatically released upon the execution by CME and each of the other Grantors of the provision set forth following our signature hereof:

[Describe applicable Clearing Member Customer Collateral Account, Clearing Member Customer FX Account, Clearing Member Money Fund Shares or Gold Warrants to be released] (collectively, the “**Specified Collateral**”)

[Remainder of page intentionally left blank.]

Very truly yours,

CITIBANK, N.A. acting through its agency and
trust division, as Collateral Agent

By: _____
Name: _____
Title: _____

BANK OF AMERICA, N.A., as Administrative
Agent

By: _____
Name: _____
Title: _____

Each undersigned Grantor hereby assigns, pledges and transfers to the Collateral Agent (for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks) and grants to the Collateral Agent (for its benefit and the benefit of the Administrative Agent, the Collateral Monitoring Agent and the Banks) a security interest in and continuing lien on all of such Grantor's right, title and interest in, to and under the Specified Collateral, which security interest will not attach except as provided in Section 2.1(b) of the Security Agreement, and such security interest shall secure the respective obligations described in Section 2.1(d) of the Security Agreement.

Agreed to and Accepted:

CHICAGO MERCANTILE EXCHANGE INC.

By: _____
Name: _____
Title: _____

[Insert signature blocks for other Grantors]

By: CHICAGO MERCANTILE EXCHANGE INC.,
as Member Attorney-in-Fact

By: _____
Name: _____
Title: _____

Amended Security and Pledge Agreement

MONEY FUND ISSUERS

1. Blackrock Liquidity Funds, a Delaware statutory trust, on behalf of its series (i) FedFund and (ii) T-Fund
2. DWS Money Market Trust, a Massachusetts business trust, on behalf of its series DWS Government Money Market Series
3. Dreyfus Treasury & Agency Cash Management, a Massachusetts business trust
4. Dreyfus Government Cash Management Funds, a Massachusetts business trust, on behalf of its series Dreyfus Government Cash Management
5. First American Funds, Inc., a Minnesota corporation, on behalf of its series (i) Government Obligations Fund and (ii) Treasury Obligations Fund
6. Goldman Sachs Trust, a Delaware business trust, on behalf of its series (i) Goldman Sachs Financial Square Government Fund and (ii) Goldman Sachs Financial Square Treasury Solutions Fund
7. HSBC Funds, a Delaware statutory trust, on behalf of its series HSBC U.S. Government Money Market Fund
8. JPMorgan Trust II, a Delaware statutory trust, on behalf of its series (i) JPMorgan U.S. Government Money Market Fund and (ii) JPMorgan U.S. Treasury Plus Money Market Fund
9. Legg Mason Partners Institutional Trust, a Maryland statutory trust, on behalf of its series Western Asset Institutional Government Reserves
10. Federated Hermes Money Market Obligations Trust, a Massachusetts business trust, on behalf of its series (i) Federated Hermes Institutional Money Market Management, (ii) Federated Hermes Government Obligations Fund, and (iii) Federated Hermes Treasury Obligations Fund
11. Morgan Stanley Institutional Liquidity Funds, a Massachusetts business trust, on behalf of its series (i) Treasury Portfolio and (ii) Government Portfolio
12. RBC Funds Trust, a Delaware statutory trust, on behalf of its series U.S. Government Money Market Fund
13. State Street Institutional Investment Trust, a Massachusetts business trust, on behalf of its series (i) State Street Institutional Liquid Reserves Fund, (ii) State Street Institutional U.S. Government Money Market Fund and (iii) State Street Institutional Treasury Plus Money Market Fund
14. UBS Series Funds, a Delaware statutory trust, on behalf of its series (i) UBS Select Government Preferred Fund, (ii) UBS Select Treasury Preferred Fund, (iii) UBS Select Government Institutional Fund and (iv) UBS Select Treasury Institutional Fund

15. Wells Fargo Funds Trust, a Delaware statutory trust, on behalf of its series (i) Wells Fargo Advantage Heritage Money Market Fund, (ii) Wells Fargo Government Money Market Fund – Select Class and (iii) Wells Fargo Treasury Plus Money Market Fund – Institutional Class

Schedule II

BANK OF CHINA CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

None.

Schedule III

BANK OF CHINA COLLATERAL SECURITIES ACCOUNTS

None.

Schedule IV

BBH CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

Account Number	Account Name
██████	CME CUS SEG REG 1.20 TEMP
██████	CME CUS CLD SWP PT 22 TEMP

BBH COLLATERAL SECURITIES ACCOUNTS

Account Number	Account Name
██████	CME INC MBR FIRM PROP DRW

BMO CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

Account Number	Account Name
██████████	Chicago Mercantile Exchange Inc. Cleared Swaps Customer Account, Temporary CFTC Part 22 Cleared Swaps Customer Account under Section 4d(f) of the Commodity Exchange Act
██████████	Chicago Mercantile Exchange Inc. Futures Customer Omnibus Account Temporary CFTC Regulation 1.20 Customer Segregated Account under Sections 4d(a) and 4d(b) of the Commodity Exchange Act

Schedule VII

BMO COLLATERAL SECURITIES ACCOUNTS

Account Number	Account Name
[REDACTED]	Chicago Mercantile Exchange Inc. Member Firm Proprietary Draw Account

Schedule VIII

BNP CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

None.

Schedule IX

BNP COLLATERAL SECURITIES ACCOUNTS

None.

Schedule X

BNY MELLON CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

Account Number	Account Name
██████	CME CUST CLEARED SWAPS PT 22 TEMP AC/XMF
██████	CME INC CUST REG 1 20 TEMP ACCOUNT/XMB

BNY MELLON COLLATERAL SECURITIES ACCOUNTS

Account Number	Account Name
██████████	CME INC MBR PROP DRAW/XMG

CITIBANK CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

Account Number	Account Name
██████	CHICAGO MERCANTILE EXCHANGE INC. CLEARED SWAPS CUSTOMER ACCOUNT TEMPORARY CFTC PART 22 CLEARED SWAPS CUSTOMER ACCOUNT UNDER SECTION 4D(F) OF THE COMMODITY EXCHANGE ACT
██████	CHICAGO MERCANTILE EXCHANGE INC. FUTURES CUSTOMER OMNIBUS ACCOUNT TEMPORARY CFTC REGULATION 1.20 CUSTOMER SEGREGATED ACCOUNT UNDER SECTION 4D(A) AND 4D(B) OF THE COMMODITY EXCHANGE ACT
██████	CHICAGO MERCANTILE EXCHANGE INC. CLEARED SWAPS CUSTOMER ACCOUNT TEMPORARY CFTC PART 22 CLEARED SWAPS CUSTOMER ACCOUNT UNDER SECTIONS 4D(F) OF THE COMMODITY EXCHANGE ACT
██████	CHICAGO MERCANTILE EXCHANGE INC. FUTURES CUSTOMER OMNIBUS ACCOUNT TEMPORARY CFTC REGULATION 1.20 CUSTOMER SEGREGATED ACCOUNT UNDER SECTION 4D(A) AND 4D(B) OF THE COMMODITY EXCHANGE ACT
██████	Chicago Mercantile Exchange Inc. Temporary CFTC Regulation 30.7 Customer Secured Account (FEX) under Section 4(b) of the Commodity Exchange Act, Safekeeping
██████	Chicago Mercantile Exchange Inc. Temporary CFTC Regulation 30.7 Customer Secured Account (FEX) under Section 4(b) of the Commodity Exchange Act, Safekeeping

CITIBANK COLLATERAL SECURITIES ACCOUNTS

Account Number	Account Name
██████	CHICAGO MERCANTILE EXCHANGE INC. GUARANTY FUND DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS - INTEREST RATE SWAPS
██████	CHICAGO MERCANTILE EXCHANGE INC. GUARANTY FUND DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS - CREDIT DEFAULT SWAPS
██████	CHICAGO MERCANTILE EXCHANGE INC. GUARANTY FUND DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS – BASE
██████	CHICAGO MERCANTILE EXCHANGE INC. MEMBER FIRM PROPRIETARY DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS
████████	CHICAGO MERCANTILE EXCHANGE INC. HOUSE ACCOUNT
████████	Chicago Mercantile Exchange Inc. Member Firm Foreign Futures Proprietary Draw Account (FEX), Safekeeping
██████	Chicago Mercantile Exchange Inc. Member Firm Foreign Futures Proprietary Draw Account (FEX), Safekeeping

CITIBANK COMPANY SECURITIES ACCOUNTS

Account Number	Account Name
██████	CHICAGO MERCANTILE EXCHANGE INC. COMPANY FUND DRAW ACCOUNT

JPMORGAN CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

None.

Schedule XVI

JPMORGAN COLLATERAL SECURITIES ACCOUNTS

None.

Schedule XVII

LAKESIDE BANK CLEARING MEMBER CUSTOMER COLLATERAL ACCOUNTS

None.

Schedule XVIII

LAKESIDE BANK COLLATERAL SECURITIES ACCOUNT

None.

Schedule XIX

OTHER CLEARING MEMBER CUSTOMER SECURITIES COLLATERAL ACCOUNT

None.

OTHER CLEARING MEMBER COLLATERAL SECURITIES ACCOUNT

None.

JPMORGAN BULLION ACCOUNTS

Account Number	Account Name
██████	JPM as coll agt gold coll allocated

CLEARING MEMBER MONEY FUND SHARE REGISTRATIONS

Chicago Mercantile Exchange Inc. Member Firm Proprietary Draw Account

Chicago Mercantile Exchange Inc. Futures Customer Omnibus Account, Temporary CFTC Regulation 1.26 Customer Segregated Money Market Mutual Fund Account under Sections 4d(a) and 4d(b) of the Commodity Exchange Act

Chicago Mercantile Exchange Inc. Futures Customer Omnibus Account, Temporary CFTC Regulation 1.26 Customer Segregated Money Market Mutual Fund Account under Section 4d(f) of the Commodity Exchange Act

CME INC FUTURES CUST OMNI ACCT,
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DA AND
4DB OF THE COMMODITY EXCHANGE ACT

CME INC FUTURES CUST OMNI ACCT,
TEMPORARY CFTC REG 1.26 CUSTOMER
SEGREGATED MMMF ACCT UNDER SECTION
4DF OF THE COMMODITY EXCHANGE ACT

CME Inc Cust Seg Reg 1.26 Temp Account

CME INC CUST SEG REG 1.26 TEMP ACCT

CME CUST CLEARED SWAP REG 1.26 TEMP ACCT

CME INC CUST CLEARED SWAP REG 1.26 TEMP ACCT

CHICAGO MERCANTILE EXCHANGE INC. MEMBER FIRM PROPRIETARY DRAW ACCOUNT

CME MEMBER FIRM PROPRIETARY DRAW ACCT

CME INC MEMBER FIRM PROPRIETARY DRAW ACCOUNT

CME Member Firm Proprietary Draw Account

CHICAGO MERCANTILE EXCHANGE INC FUTURES CUSTOMER OMNIBUS ACCOUNT
TEMPORARY CFTC REG 1.26 CUSTOMER SEGREGATED MMMF ACCOUNT UNDER
SECTIONS 4D(A) AND 4D(B) OF THE CEA

CHICAGO MERCANTILE EXCHANGE INC FUTURES CUSTOMER OMNIBUS ACCOUNT
TEMPORARY CFTC REG 1.26 CUSTOMER SEGREGATED MMMF ACCOUNT UNDER
SECTIONS 4D(F) OF THE CEA

CHICAGO MERCANTILE EXCHANGE INC MEMBER FIRM PROPRIETARY DRAW ACCOUNT

CME INC CUST SEG TEMP
CME TEMP CFTC REG 1.26 CUSTSEG
UNDER 4DA&4DB OF CEA
SUBJECT TO USCA CME-CITI

CME INC CLEARED SWAPS CUST
CME TEMP CFTC REG 1.26 CUSTSWP
UNDER 4DF OF CEA
SUBJECT TO USCA CME-CITI

CME INC MBR FIRM PROP DRAW ACC

CME INC CUST SEG TEMP
CME TEMP CFTC REG 1.26 CUSTSEG
UNDER 4DA&4DB OF CEA
SUBJECT TO USCA CME-CITI

CME INC CLEARED SWAPS CUST
CME TEMP CFTC REG 1.26 CUSTSWP
UNDER 4DF OF CEA
SUBJECT TO USCA CME-CITI

CME INC MBR FIRM PROP DRAW ACC

CME INC MBR FIRM PROP DRAW ACC

CME INC FUTURES CUST OMNI ACCT,
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DA AND
4DB OF THE COMMODITY EXCHANGE ACT

CME INC MBR FIRM PROP DRAW

CME INC FUTURES CUST OMNI ACCT,
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DA AND
4DB OF THE COMMODITY EXCHANGE ACT

CME INC MBR FIRM PROP DRAW

CME INC FUTURES CUST OMNI ACCT
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DA AND
4DB OF THE COMMODITY EXCHANGE ACT

Chicago Mercantile Exchange Inc
Member Firm Proprietary
Draw Account

CME INC FUTURES CUST OMNI ACCT
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DA AND
4DB OF THE COMMODITY EXCHANGE ACT

Chicago Mercantile Exchange Inc
Member Firm Proprietary
Draw Account

CME INC CUST SEG REG 1.26 TEMP ACCT
CME INC CUST SEG REG 1.26 TEMP ACCTChicago Mercantile Exchange Inc.
Member Firm Proprietary
Draw Account

CME INC CUST SEG REG 1.26 TEMP ACCT

Chicago Mercantile Exchange Inc.
Member Firm Proprietary
Draw Account

CME INC FUTURES CUST OMNI ACCT,
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DA AND
4DB OF THE COMMODITY EXCHANGE ACT

CME INC CLDSWPS CUST OMNI ACCT,
TEMPORARY CFTC REG 1.26 CUST SEG
MMMF ACCT UNDER SECTION 4DF
OF THE COMMODITY EXCHANGE ACT

CME INC MEMBER FIRM PROPRIETARY DRAW ACCT

CME INC CUST SEG REG 1.26 TEMP ACCT

CME CUST CLEARED SWAP REG 1.26 TEMP ACCT

CME MEMBER FIRM PROP DRAW ACCT

Schedule XXIII

JPMORGAN CLEARING MEMBER CUSTOMER FX ACCOUNTS

None.

JPMORGAN CLEARING MEMBER FX ACCOUNTS

None.

OTHER CLEARING MEMBER CUSTOMER COLLATERAL DEPOSIT ACCOUNT

Depository Bank	Account Number	Account Name
The Bank of New York Mellon	██████████	CME CUST CLD SWP PT22 TEMP-FBO CITI
The Bank of New York Mellon	██████████	CME CUST SEG REG 1.20 TEMP-FBO CITI
Citibank, N.A.	██████████	CHICAGO MERCANTILE EXCHANGE INC. CLEARED SWAPS CUSTOMER ACCOUNT TEMPORARY CFTC PART 22 CLEARED SWAPS CUSTOMER ACCOUNT UNDER SECTIONS 4D(F) OF THE COMMODITY EXCHANGE ACT
Citibank, N.A.	██████████	CHICAGO MERCANTILE EXCHANGE INC. FUTURES CUSTOMER OMNIBUS ACCOUNT TEMPORARY CFTC REGULATION 1.20 CUSTOMER SEGREGATED ACCOUNT UNDER SECTION 4D(A) AND 4D(B) OF THE COMMODITY EXCHANGE ACT
Citibank, N.A.	██████████	CHICAGO MERCANTILE EXCHANGE INC. FUTURES CUSTOMER OMNIBUS ACCOUNT TEMPORARY CFTC REGULATION 1.20 CUSTOMER SEGREGATED ACCOUNT UNDER SECTION 4D(A) AND 4D(B) OF THE COMMODITY EXCHANGE ACT
Citibank, N.A.	██████████	Chicago Mercantile Exchange Inc. Temporary CFTC Regulation 30.7 Customer Secured Account (FEX) under Section 4(b) of the Commodity Exchange Act
Citibank, N.A.	██████████	Chicago Mercantile Exchange Inc. Temporary CFTC Regulation 30.7 Customer Secured Account (FEX) under Section 4(b) of the Commodity Exchange Act

OTHER CLEARING MEMBER COLLATERAL DEPOSIT ACCOUNT

Depository Bank	Account Number	Account Name
The Bank of New York Mellon	██████	CME INC MBR FIRM PROP DRAW-FBO CITI
Citibank, N.A.	██████	CHICAGO MERCANTILE EXCHANGE INC. GUARANTY FUND DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS - INTEREST RATE SWAPS
Citibank, N.A.	██████	CHICAGO MERCANTILE EXCHANGE INC. GUARANTY FUND DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS - CREDIT DEFAULT SWAPS
Citibank, N.A.	██████	CHICAGO MERCANTILE EXCHANGE INC. GUARANTY FUND DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS - BASE
Citibank, N.A.	██████	CHICAGO MERCANTILE EXCHANGE INC. MEMBER FIRM PROPRIETARY DRAW ACCOUNT FOR THE BENEFIT OF CLEARING MEMBERS
Citibank, N.A.	██████	Chicago Mercantile Exchange Inc. Member Firm Foreign Futures Proprietary Draw Account (FEX)
Citibank, N.A.	██████	Chicago Mercantile Exchange Inc. Member Firm Foreign Futures Proprietary Draw Account (FEX)

OTHER COMPANY DEPOSIT ACCOUNT

Depository Bank	Account Number	Account Name
Citibank, N.A.	██████████	CHICAGO MERCANTILE EXCHANGE INC. COMPANY FUND DRAW ACCOUNT

GOLD WARRANTS

The gold covered by a Gold Warrant shall be identified in such Gold Warrant by (i) the product covered by the Gold Warrant as gold, (ii) the brand of the gold, (iii) the serial number of the gold bar, (iv) the fineness of the gold, (v) the net weight of the gold, and (vi) the fine weight of the gold.

OTHER BULLION ACCOUNTS

None.

OTHER BULLION ACCOUNT BANKS

None.

OTHER CLEARING MEMBER CUSTOMER FX ACCOUNTS

None.

OTHER CLEARING MEMBER FX ACCOUNTS

None.

OTHER COMPANY SECURITIES ACCOUNTS

None.

Schedule XXXIV

OTHER FX ACCOUNT BANKS

None.

GOLD WARRANTS ISSUERS

BRINK'S, INC.
DELAWARE DEPOSITORY
HSBC BANK, USA
INTERNATIONAL DEPOSITORY SERVICES OF DELAWARE
JP MORGAN CHASE BANK NA
LOOMIS INTERNATIONAL (US) INC.
MALCA-AMIT USA, LLC
MANFRA, TORDELLA & BROOKES, INC.

CLEARING MEMBERS

ABN AMRO Clearing Chicago LLC	Ironbeam, Inc.
ADM Investor Services, Inc.	J.P. Morgan Securities LLC
Advantage Futures, LLC	Jump Trading Futures, LLC
Banco Bilbao Vizcaya Argentaria, S.A.	Logista Clearing Corporation LLC
Bank of Montreal	Macquarie Futures USA LLC
Barclays Capital Inc.	Marex Capital Markets Inc.
BMO Capital Markets Corp.	Marex North America LLC
BNP Paribas	Mizuho Securities USA LLC
BNP Paribas Securities Corp.	Morgan Stanley & Co. LLC
BofA Securities, Inc.	Nanhua USA LLC
BP Energy Company	NatWest Markets Plc
BP Products North America Inc.	NatWest Markets Securities Inc.
Bunge Chicago, Inc.	Nomura Securities International, Inc.
Cantor Fitzgerald & Co.	Phillip Capital Inc.
CHS Hedging, LLC	Proxima Clearing, LLC
CIBC World Markets Corp.	R.J. O'Brien & Associates, LLC
Citigroup Global Markets Inc.	Rabo Securities USA Inc.
Credit Agricole Corporate and Investment Bank	RBC Capital Markets, LLC
Credit Suisse International	Royal Bank of Canada
Credit Suisse Securities (USA) LLC	Santander US Capital Markets LLC
Cunningham Commodities, LLC	Scotia Capital (USA) Inc.
Daiwa Capital Markets America Inc.	SG Americas Securities LLC
Deutsche Bank AG	Societe Generale
Deutsche Bank Securities Inc.	Standard Chartered Bank
Direct Access USA LLC	StoneX Financial Inc.
Dorman Trading, L.L.C.	Straits Financial LLC
DRW Execution Services, LLC	Term Commodities Inc.
Eagle Market Makers, Inc.	The Bank of Nova Scotia
G.H. Financials, LLC	The Toronto-Dominion Bank
Gelber Group, LLC	TradeStation Securities, Inc.
Goldman Sachs & Co. LLC	UBS Securities LLC
Hidden Road Partners CIV US LLC	Wedbush Securities, Inc.
HSBC Securities (USA) Inc.	Wells Fargo Securities, LLC
Interactive Brokers LLC	

GOLD WARRANT CLEARING MEMBERS

J.P. Morgan Securities LLC
Macquarie Futures USA LLC
Scotia Capital (USA) Inc.
Goldman Sachs & Co. LLC
Deutsche Bank AG
HSBC Securities (USA) Inc.
Barclays Capital Inc.
BNP Paribas Securities Corp.
Standard Chartered Bank
Credit Suisse Securities (USA) LLC
Morgan Stanley & Co. LLC
Marex North America LLC
SG Americas Securities, LLC
Wells Fargo Securities, LLC
StoneX Financial Inc.
Deutsche Bank Securities Inc.
RBC Capital Markets, LLC
BMO Capital Markets Corp.

Schedule XXXVIII

CLEARING MEMBER CUSTOMER GOLD WARRANT ADVANCE DEPOSIT ACCOUNTS

Account Number	Account Name
██████	CME CUST GLD WRNT ADV DEP BRINKS
██████	CME CUST GLD WRNT ADV DEP DEL DEPST
██████	CME CUST GLD WRNT ADV DEP HSBC
██████	CME CUST GLD WRNT ADV DEP IDS DEL
██████	CME CUST GLD WRNT ADV DEP JPM CHASE
██████	CME CUST GLD WRNT ADV DEP LOOMIS
██████	CME CUST GLD WRNT ADV DEP MLCA AMIT
██████	CME CUST GLD WRNT ADV DEPMTB

GOLD BULLION CLEARING MEMBERS

Barclays Capital Inc.
BNP Paribas Securities Corp.
Deutsche Bank Securities Inc.
Deutsche Bank AG
J.P. Morgan Securities LLC
Macquarie Futures USA LLC
The Bank of Nova Scotia
Standard Chartered Bank