



Customer Gross Margining – Technical Overview

Introduction

“**Customer Gross Margining**” (**CGM**) is a CFTC mandate that took effect in January 2013. CGM is also used for CME Clearing Europe firms, from August 2014.

This document pulls technical information from prior Advisories into one document, and adds additional technical detail.

Customer Gross Margining was a significant change in how derivatives clearing organizations (DCOs) calculate performance bond (initial margin) requirements for customer positions. Specifically, under CFTC Regulation 39.13(g)(8)(i), DCOs are required to set a firm’s minimum performance bond level as the sum of requirements calculated for each individual customer account.

Customer Gross Margining required CME Clearing and some other DCOs to switch away from the “modified Customer Gross Margining method” which had long been used. Under the previous method, clearing firms categorized individual customer account positions according to the degree to which risk offsets exist, and reported this data twice daily (as the “spreads” information included in the PCS submission used to determine open interest). The new method assures that client account risk offsets are applied only for the benefit of each individual customer account, and Intraday PCS is no longer required.

The key operational implication of Customer Gross Margining is that the DCO must know positions for all customers. For interest rate swaps (IRS) and credit default swaps (CDS), CME Clearing already holds positions customer by customer. For certain other cleared swaps and for most futures, however, customer positions are held in the clearing system in position accounts that typically commingle positions of many individual customers.

For customer positions in futures and in these other types of cleared swaps, therefore, clearing firms must submit a data file, to identify positions by individual customer, so that CME Clearing may calculate margins customer by customer. The file must be submitted for only the end-of-day settlement cycle at this time. We refer to this file as the **Customer Gross Margin file**, or simply the **CGM file**.

The industry has selected FIXML as the standard format for the CGM file. The format is highly analogous to the FIXML PCS format widely in use.

PCS submission is not affected

While end-of-day margin requirements for customer positions are calculated based on the data contained in the CGM file submission, *PCS files should be created and sent in exactly the same manner as always, with the same data integrity and deadlines currently in force. The only exception is that spread data is no longer required in the PCS file (i.e. “IAS” and “IES” Quantity Blocks).*

Submission deadline for the CGM file

CME Group is requiring only one Customer Gross Margining file transmission per day, reflecting the end-of-day positions. The cutoff time for file submission is 8:00pm Central time for the US file, and 11:45pm London time, for the CCE file.

Identifying customer accounts, and use of Firm numbers

The “firm number” in the file should be provided in exactly the same manner as is currently done for trade submissions and the account ID will identify the individual customer account. **Note that for the same**

account, different firm numbers may be required, as not all clearing firms use the same firm number for all trades on all exchanges. Existing firm mappings should be used when determining the firm number assigned to a position.

In other words, provide the firm number on the CGM submission, in exactly the same manner as is done for the PCS submission.

Use of “related master” accounts

Where multiple customer accounts have the same owner, the account ID provided should be the “related master” account ID which ties all the detail accounts together, in keeping with the current bookkeeping practice for margining. The goal of CGM is to margin accounts in clearing, as they are margined at the firm.

Reconciliation of submitted customer position data, to positions in clearing

Position quantities submitted in the CGM file that do not match positions in the CME Positions system are noted, and added to a “position difference” account. A margin requirement is calculated for the position difference account, and is included in the total requirement calculated.

Reconciliation csv files are created for each processing day, showing the position quantities as submitted in the CGM file, the position quantities in clearing, and the difference between the two for each contract held by the firm. The reconciliation process that calculates these position differences is described in more detail below, and the layout of the csv output is detailed in Appendix A.

Submission of data for expiring options

For positions in expiring options: clearing firms differ in the timing of when they process final exercises and assignments in books. Clearing firms have a choice, therefore, in how these positions are represented in the CGM file: either prior to final E&A processing, or after such processing.

Because we are providing firms with this expiration day flexibility, CME has built its system to perform pseudo-E&A processing on the submitted CGM data. In other words, on expiration day, CME Group will reduce all expiring option quantities to zero, and convert in-the-money options to their corresponding futures, if applicable. This will align CME Clearing positions to the CGM file positions for reconciliation purposes later in the process.

Note that for most option products, contrary instructions may be provided by the long position holders at expiration time – *i.e.*, instructions not to exercise in-the-money positions, or to exercise out-of-the-money positions. Because the effect of contrary instructions to short option holders cannot be predicted, such instructions may result in discrepancies between CGM positions as submitted versus final positions in clearing. Any such position differences become part of the position difference account described above.

Reconciliation of option positions prior to expiration

For long positions in American-style options that have been exercised prior to expiration, positions should be aligned for reconciliation purposes, provided that the exercise has been performed in bookkeeping systems as well as in clearing.

Futures relating to assignments resulting from options that have been exercised prior to expiration will result in a position difference in the reconciliation process, which likewise will give rise to a margin requirement for the position difference account. This cannot be avoided, due to the timing of these events.

Effect of out-trades on position reconciliation

Floor trades that have been reported to CME Clearing, but not matched with a contra side by end of day, are not reflected as cleared trades in the CME Positions system. Firms, however, keep these trades in customer accounts, assuming that they have been entered correctly, and will submit CGM data for them and margin them with all other positions.

Unmatched trades (floor out-trades) will *not* be included in the CME Clearing side for reconciliation purposes. They will, however be noted on the reconciliation report.

Calculation of customer margins at the intraday settlement cycle

Given certain current clearing firm practices, CME does not believe it is possible for firms to submit an accurate Customer Gross Margin position file at the intraday settlement cycle. Therefore, CME has adopted an alternative approach, and has received guidance from the CFTC that this approach is consistent with the regulations.

Specifically, CME will evaluate the risk exposure of the customer positions of the FCM, on a net basis across all customers, both at the end-of-day clearing cycle and at the intraday clearing cycle. The actual customer-origin gross margin requirement at the intraday cycle is determined as the gross margin requirement from the previous day's end-of-day cycle, plus any amount by which the overall risk exposure has increased.

The bottom lines for firms: (a) there is no requirement to submit an intraday Customer Gross Margin position file, and (b) the customer-origin margin requirement at intraday will be either the same as it was at the previous end-of-day, or a larger value if the overall customer risk exposure calculated on a net basis has increased.

File Submission

CGM data files should be transmitted to the firm's "Incoming" directory on the CME Clearing Firm Secure FTP Server, exactly as PCS and Large Trader files are submitted. The file naming convention is as follows:

FileType.CMF.FileNumber.xml where

- FileType = "**CGM**"
- CMF = Clearing Firm ID (note this is *not* the Trade Management Firm (TMF) ID that is used for trades submitted to Clearing; it is the overall Clearing ID that is used to group all of your TMF IDs together). This is the firm ID used at the highest level, for variation, margin, and billing purposes.
- FileNumber = "01," "02," etc. If you only submit one file for all of your business each day (most firms), then the file will always have "01" in the file name. If, for some reason, you need to send multiple files to your Incoming directory to report the full breadth of your business, then each file should be named per the convention (but named the same way each day). CME Clearing needs to know if you intend to send more than one file to cover all of your business. Please contact your CGM representative if this is the case, so that arrangements can be made for multiple file submissions each day. If not informed otherwise, it is assumed that only one file will be transmitted each day.

If a resubmission of a file is necessary, a firm will be notified, and the file name will not change; that is, existing data will be removed from CME Clearing, making way for a new file submission.

If your Clearing Firm ID is "ABC," then your CGM file name, if you send only one file, will be CGM.ABC.01.xml. If you were to send two files each day to fully describe your business, the file names would be CGM.ABC.01.xml and CGM.ABC.02.xml, and so on.

CME Clearing Europe files should follow the same naming convention, with the exception of adding "CCE." to the beginning of the file name. So for CCE, if your Clearing Firm ID is "ABC," then your CGM file name, if you send one file per day, will be CCE.CGM.ABC.01.xml.

If you should need assistance with FTP, please contact CCS at 312-207-2525 or via email at ccs@cmegroup.com.

Details on the CGM file via FIXML

The file should be formatted with a heading such as:

```
<?xml version="1.0" encoding="UTF-8"?><FIXML><Batch>
- or -
<?xml version="1.0" encoding="UTF-8"?>
<FIXML>
<Batch>
```

The file should be terminated with trailing tags such as:

```
</Batch></FIXML>
- or -
</Batch>
</FIXML>
```

Each Position Maintenance Request (PosMntReq) message should be written to a single line within the CGM file, as opposed to the indented format that is shown below (which has been done for readability purposes). An example of this "single-line" format can be seen in the FIXML Trade Register files that are delivered to each firm's "Outgoing" FTP folder each clearing business day. While both formats are technically "legal" from a FIXML/xml standpoint, the single-line format has several advantages. First is the size. Single-line formatted files are smaller, due to less carriage returns. Even though carriage returns are treated the same as "white space" as far as an xml parser is concerned, they still take up space. Second, and more important, is that the single-line format gives us the ability to quickly look at a file in a text editor, and know how many messages are in the file, without having to actually parse it. It is also easier to identify abnormally long or short messages. This is valuable when file examination is time-critical.

The following page shows sample data and formatting for a FIXML Position Maintenance Request message (note that the "/" and description to the right are not to be included in the actual messages).

```

<PosMntReq                                     // position maintenance request message
  ReqID="123456789"                             // unique record ID
  TxnTyp="4"                                     // position specification
  AdjTyp="4"                                     // customer-specific submission
  Actn="1"                                       // new submission
  BizDt="2012-02-06"                             // clearing business date
  SetSesID="EOD"                                 // settlement cycle (end-of-day)
  TxnTm="2012-02-06T18:23:49">                // submission time

```

```

<Pty ID="CME" R="21"/>                          // clearing organization
<Pty ID="111" R="4"/>                            // clearing member firm ID
<Pty ID="NYMEX" R="22"/>                         // firm exchange
<Pty ID="111" R="1"/>                            // trade mgmt firm ID
<Pty ID="ABC12345" R="24">                       // customer account
  <Sub ID="1" Typ="26"/>                         // customer origin
  <Sub ID="ACCT NAME" Typ="5"/>                  // account name
  <Sub ID="H" Typ="41"/>                         // customer account type
  <Sub ID="OMNIACCT" Typ="42"/>                 // omnibus account, if relevant
  <Sub ID="AB" Typ="24"/>                       // office code
  <Sub ID="USA" Typ="31"/>                     // country of origin
  <Sub ID="JANE SMITH" Typ="9"/> // client contact person
  <Sub ID="312-123-4567" Typ="7"/> // client telephone number
  <Sub ID="jane@smith.com" Typ="8"/> // client email
  <Sub ID="Two Shady Lane, Chicago IL 60606" Typ="6"/> // client address

```

```

</Pty>

```

```

<Pty ID="1234567890" R="52"/> // CFTC Reportable Number
<Pty ID="ABCDEFXABC" R="7" Src="N"/> // US LEI of the client

```

```

</Pty>

```

```

<Instrmt                                     // contract data
  Exch="NYMEX"
  ID="CL"
  SecTyp="FUT"
  MMY="201503"/>

```

```

<Qty Typ="TQ" Long="4250" Short="1243"/> // long and/or short quantity *
</PosMntReq>

```

*Quantities should be long OR short (not both) for customer accounts, i.e., the "net" for a contract. If it is not possible to net at the contract level for an account for whatever reason, long AND short positions may be submitted, and the values will be netted prior to margining. Zero quantities may be included or omitted. For instance, a long position of 432 could be represented as **<Qty Typ="TQ" Long="432"/>** or **<Qty Typ="TQ" Long="432" Short="0"/>**.

Omnibus accounts can have long AND short positions for any contract, as that is the nature of an omnibus account.

Main Position Maintenance Request Message Attributes:

Request ID (ReqID) – This is a user-defined ID, up to 20 characters, that is used to identify the FIXML message. While the value is not required to be unique, it can be helpful in identifying individual messages; using a unique ID is preferred.

Transaction Type (TxnTyp) – This tag specifies that the message relates to a position. The value is static, and should always be “4.”

Adjustment Type (AdjTyp) – Adjustment type relates to this message belonging to a specific customer (entity), or group of customers that are margined together at the firm. That is, the record does not represent groups of customers that cannot be margined together. This value is always set to “4.”

Action Code (Action) – CME Group accepts only “New” messages, meaning that “Replace” and “Delete” messages do not apply to CME Group CGM messages. As such, only an Action Code of “1” should be included in the file.

Clearing Business Date (BizDt) – The business date specified in the file relates to the date for which positions will be margined. The format for BizDt is YYYY-MM-DD.

Settlement Session ID (SetSesID) – Currently, only End of Day (EOD) messages are accepted for Customer Gross Margining. For launch, include only value “EOD” for Settlement Session ID.

Transaction Time (TxnTm) – Transaction Time is the time when the CGM file was created. The timestamp contains both the date and the time to the second. The format for Transaction Time is YYYY-MM-DD plus “T” plus HH:MM:SS.

Party Role Blocks and Party Role Sub-Types within the Position Maintenance Request Message:

Party Block, Role 21 – The ID for Party Role 21, Clearing Organization, for CME Group messages is always “CME” for the US-based file, and “CCE” for CME Clearing Europe.

Party Block, Role 4 – For CME Group, the Clearing Member Firm (CMF) ID is optional, and may be omitted. If Party Role 4 is included in the FIXML messages, then the correct Clearing Firm ID must be supplied. If the Clearing Firm ID does not resolve to the Clearing Firm ID associated with the Trade Management Firm (“TMF,” Party Role 1), then that message will be rejected. This value, if supplied, must also resolve to the firm ID used in the file name of the data set that is submitted to CME Clearing.

Party Block, Role 22 – Role 22 represents the “Firm Exchange” for the product named in the Instrument Block. That is, the value represents the exchange associated with your firm ID at the contract level. For CME Group, IDs are as follows:

- For CME positions – “CME”
- For CBT positions – “CBT”
- For NYMEX, COMEX, and DME positions – “NYMEX”
- For All CME CE positions – “CCE”

Party Block, Role 1 – Your Trade Management Firm (TMF) is represented in this block. It is the “child” firm ID to an overall clearing “parent” ID (the CMF). Many firms have a TMF that equates to the CMF, but also have multiple TMFs. This ID is the same one used in FIXML messages sent to/from CME Clearing and it is also known as the “firm number” when looking trades up in the CME Group Front End Clearing (FEC) UI.

Party Block, Role 24 – This is the customer account ID used for margining purposes at the clearing firm level. It can represent a single customer, or a group of customers that are margined together in the firms’ bookkeeping systems. For CGM purposes, **the account ID is limited to 15 characters; account IDs greater than 15 characters will be rejected as errors.**

Party Block Role 24 Sub-Type 26 – Sub-Type Block 26 – This represents the Origin of the position. ID “1” means Customer origin; ID “2” means House origin. For CGM, only Customer positions are currently reported, so only ID = “1” will be accepted.

Party Block Role 24 Sub-Type 5 - The account name is as specified on the firm's books and is currently optional for the purposes of CME Group CGM reporting. If not reporting the account name, please do not include this Party block Sub-Type. Examples of Party Role Sub-Type could be "John Smith" or "Amalgamated Speculators."

Party Block Role 24 Sub-Type 41 – This important Sub-Type represents the type of account that is being margined. The allowed values are:

- Member ("M")
- Hedger ("H")
- Speculator ("S")
- Omnibus ("O") – more on omnibus accounts below

Party Block Role 24 Sub-Type 42 – This block allows an omnibus account to be specified, if the customer account belongs to one. If the account specified in Party Role 24 is not associated with an omnibus account, do not include this Party Role Sub block. More on omnibus accounts below.

Party Role 24 Sub-Types and extra Party blocks related to "Additional Customer Data" are highlighted in yellow above. Further information for use of these fields can be found at:

<http://www.cmegroup.com/tools-information/lookups/advisories/clearing/files/Chadv14-127a.pdf>

Please remember that if this data is not supplied with CGM data, then it should be submitted via a standalone "MAM" file, or through the "FIA Tech" solution.

The Instrument Block within the Position Maintenance Request Message

Instrument block usage is standard among all CME Group FIXML messages. The example above shows how it looks for a future.

Here is an example of how it would look for a "vanilla" option on future, where the underlying instrument need not be specified:

```
<Instrmt
  Exch="NYMEX"
  ID="LO"
  SecTyp="OOF"
  PutCall="1"
  StrkPx="84.5"
  MMY="201710"/>
```

For an option such as a flexible option, where the underlying must be explicitly enumerated, the "Undly" element must be included:

```
<Instrmt
  Exch="CME"
  ID="XP"
  SecTyp="OOF"
  PutCall="1"
  StrkPx="32.75"
  MMY="20171218"/>
<Undly
  Exch="CME"
  ID="SP"
  SecTyp="FUT"
  MMY="201712"/>
```

Instrument Block within the Position Maintenance Request Message Attributes:

Exch – The exchange on which the contract is traded. Valid exchange values are CBT, CME, COMEX, DME, and NYMEX for CME Clearing in the US. For DME contracts, exchange NYMEX may be substituted. Use exchange CEE for CME Clearing Europe.

ID – The clearing code that is used to identify the product for the traded contract.

SecTyp – The type of instrument that is being reported. Valid values are:

- FUT – Future
- OOF – Option on Future (standard options and Flex options)
- OOC – Option on Combination (options on COMBO instruments); OOF may be substituted for OOC instruments

PutCall – For options only, the Put or Call code. Valid values are:

- 0 – Put
- 1 – Call

StrkPx – For options only, the strike price of the traded contract. If uncertain of strike price format, use a FIXML settlement price file for examples.

MMY – The period code of the traded contract. The format for MMY is YYYYMM for contracts that do not need a day designation to fully describe the instrument, and YYYYMMDD for contracts that must be defined to the day. Most contracts use the YYYYMM format for the period code (like Corn, Eurodollars, and the benchmark Crude Oil contracts. Contracts that use the YYYYMMDD format are typically Flex Options, and some futures contracts, such as NYMEX calendar swaps and electricity contracts. The period code is *not* the Maturity date (MatDt in FIXML) of the contract; Maturity Date is not required in the Position Maintenance Request FIXML messages.

A note on CFICode (FIXML attribute “CFI”): CFICode should not be included in CGM FIXML messages.

A small sample CGM file can be found at: <ftp://ftp.cmegroup.com/pub/span/data/cme/test/FIXML/>. The file name is CMEGroupCGMSampleNoOmnibus.xml.

Omnibus Accounts and CGM Position Reporting

For futures, the Customer Gross Margining mandate does not require any changes in how clearing firms handle omnibus accounts. Firms may continue to hold omnibus accounts on their books, and these may be fully disclosed, partially disclosed, or entirely non-disclosed.

The CGM file format supports all three of these possibilities. If you provide an omnibus account with no detail subaccounts, this is the “entirely non-disclosed” case. If you provide an omnibus account with detail accounts, and the sum of the detail account positions is equal to the omnibus account positions, then the omnibus account is fully disclosed. If you provide detail accounts, but the sum of the positions in detail accounts is less than the positions in the omnibus account, then the omnibus account is partially disclosed. If, for some reason, the sum of the positions in detail accounts is greater than that submitted for the omnibus account, then the position in the omnibus account will be increased to reflect the actual sum of customer positions.

For Customer Gross Margining, the calculation of the margin requirement for an omnibus account will follow long-established practices. First, normal portfolio margin requirements are calculated for each disclosed subaccount. The remaining non-disclosed positions are considered “naked”, and are margined without recognizing any risk offsets. The total requirement for the omnibus account, then, is the sum of

the portfolio requirements for the disclosed subaccounts, and the naked requirements for the non-disclosed positions.

In other words, to receive risk offsets within omnibus accounts, position data for subaccounts must be provided along with the omnibus account information.

It is acceptable for position data for subaccounts to be provided in a separate CGM data file, if this helps operationally. For example, the carrying clearing firm might require that the holder of omnibus subaccounts prepare a CGM data file containing the detailed breakdown of the subaccount positions. If so, the holder of the omnibus subaccounts must provide this separate data file to the carrying clearing firm, which in turn will submit it. In other words, the submission must come from the carrying clearing firm, not the firm holding the subaccounts. Remember that to receive risk offsets, sums at the omnibus subaccounts contract level must be equal to sum in corresponding omnibus accounts.

Customer Gross Margin File vs. CME Clearing Position Reconciliation

Each day, CME Clearing will compare the positions submitted by each firm, to positions as they are known in the clearing "Positions" system. As previously noted the CGM file load process will have a step that converts expiring options into futures as appropriate and add them to the cleared positions in the Positions system, to align quantities. While some bookkeeping firms may immediately load execution offset messages, thus flattening out positions, the clearing system must keep unclaimed allocations at the executing firm until claimed.

CGM file long positions and short positions are totaled separately at the contract level after adjustments, and then the aggregate short position is subtracted from the aggregate long position, giving a net position reported by the firm. Similarly, on the clearing side, the longs and shorts as cleared, along with adjustments on the clearing side, are netted, giving a net clearing position.

A position reconciliation file is created, and placed in each clearing firm's "Outgoing" folder on the secure FTP site. The file is called "CGM.CMF.RECON.YYYYMMDD.csv, where CMF is the Clearing Member Firm number.

In the case that submitted aggregate adjusted positions do not match those positions already "finalized" in the Positions system, the reconciliation process will:

- Check to see if the net submitted position (long less short) is equal to the net clearing position. If the net position is equal, but the gross position is not equal then,
 - If the submitted gross position is greater than the clearing gross position, no adjustments are made for margin purposes.
 - If the submitted gross position is less than the clearing gross position, the difference between the submitted longs and clearing longs is placed in the gross position adjustment bucket; the same is done for the shorts.
- If the net submitted position is not equal to the net clearing position, then a "re-finalization" process is used to reconcile start-of-day positions and activity, with the submitted positions, using the aggregate longs submitted, just as PCS would calculate positions based on the PCS "Final Longs."
 - If the process can arrive at the aggregate short position based on this re-finalization, then no adjustments are made for margin purposes.
 - If the process cannot arrive at the aggregate short position, then the newly calculated longs and shorts are compared to the clearing longs and shorts calculated in PCS, and where the CGM quantities are less than the PCS quantities, gross positions are added to the Position Difference account buckets.

The Position Difference account is margined via SPAN as an omnibus account (with no risk offsets), and the resulting Performance Bond requirement is added to the firm's CGM and delivery requirements, to give an overall firm PB requirement.

Positions in Delivery

For physically deliverable contracts in their delivery period up until and including a future's Last Trade Date (products like Corn, Wheat, Live Cattle, and Gold), it is expected that firms will "deliver" their futures positions in bookkeeping on the same day that a future is removed from the clearing system.

For physically deliverable contracts that have their delivery period after Last Trade Date, it is expected that these contracts will not be included in the CGM file after LTD. Positions in Delivery margins are applied to overall firm margins outside of the CGM process, as they are with the current PCS position reporting and subsequent margining.

For margin-related information please contact CME Clearing's Risk Department at 312-648-3888.

Firm CGM Margin Calculation Results

Margin calculation results are made available in a csv file that is delivered to each Clearing Member Firm's "Outgoing" FTP directory. The naming convention of the margin results files is "CME.CGM.Margins.Summary.EOD.YYYYMMDD.CMFxxx.csv, where "xxx" is the CMF ID. The layout for the csv file can be found in Appendix B of this document.

Appendix A – Position Reconciliation Layout

The following table describes the columns that are present in the CGM vs. Positions System Reconciliation csv. *Note that this report is not used for data processing by the firm. It is meant to be a human-readable account of how CME Clearing reconciled the CGM file with positions held in Clearing.*

Field	Column Header	Description
Business Date	Bus Date	Business date on which reconciliation took place
Clearing Cycle	Cycle	Cycle name
Clearing Org	CO	Clearing organization associated with the transaction
Clearing Member Firm	CMF	Clearing member firm associated with the transaction
Firm Exchange	Firm Exch	Firm exchange associated with the TMF
Trading Member Firm	TMF	Default TMF associated with the position account
Position Account	PA	Position associated with the transaction
Segregation Type (Origin)	Seg	Segregation type associated with the position account
Product Exchange	Exch	Product exchange associated with the product
Prod Description	Prod Description	Long Description of Product
Product (Clearing Symbol)	Prod Id	Product associated with the transaction
Product Type	Prod Type	Type of product associated with the transaction, e.g. FUT
Period Code	Period Code	Contract period associated with the transaction
Underlying Product	Und Prod	Underlying future product associated with an option
Underlying Period Code—options only	Und Period Code	Period code of the underlying product associated with an option
Put Call Indicator—options only	Put Call	Indicates whether the option is a put or a call
Strike Price—options only	Strike	Option strike price
Last Trade Date	Last Trade Date	Last Trade Date for Instrument
Settlement Date	Settlement Date	Final Settlement Date for Instrument
Settlement Method	Settlement Method	Settlement Method for Instrument (Cash or Deliverable)
Submitted Long Quantity	Firm Submitted Long	Long quantity submitted on the CGM record
Submitted Short Quantity	Firm Submitted Short	Short quantity submitted on the CGM record
Omnibus Adjustment Long	Firm Omni Long	Long Adjustment Due to Omnibus “Bump Up”
Omnibus Adjustment Short	Firm Omni Short	Short Adjustment Due to Omnibus “Bump Up”
Expiring Option Long Quantity	Firm Expiring Long	Long quantity that the position will be reduced by due to option expiration—applies to physically delivered option contracts only

Field	Column Header	Description
Expiring Option Short Quantity	Firm Expiring Short	Short quantity that the position will be reduced by due to option expiration—applies to physically delivered option contracts only
EA Future Long Quantity	Firm ExAsgn Long	Long quantity in underlying future(s) created due to option expiration—applies to futures contracts only
EA Future Short Quantity	Firm ExAsgn Short	Short quantity in underlying future(s) created due to option expiration—applies to futures contracts only
Total Long	Firm Total Long	((Submitted Long) - (Expiring Option Long Quantity) + (EA Future Long Quantity + Omnibus Long Adjustment))
Total Short	Firm Total Short	((Submitted Short) - (Expiring Option Short Quantity) + (EA Future Short Quantity + Omnibus Short Adjustment))
Net	Firm Total Net	(Total Long) - (Total Short)
Clearing Long	Clearing Cleared Long	Finalized Long Position in Clearing
Clearing Short	Clearing Cleared Short	Finalized Short Position in Clearing
Clearing Unmatched Long	Clearing Unmatched Long	Clearing Out-trades, Long
Clearing Unmatched Short	Clearing Unmatched Short	Clearing Out-trades, Short
Clearing Total Long	Clearing Total Long	Long Clearing Quantity Used for Reconciliation
Clearing Total Short	Clearing Total Short	Short Clearing Quantity Used for Reconciliation
Clearing Net	Clearing Net	Clearing Total Long – Clearing Total Short
Gross Long Quantity	Gross Long Qty	Position Difference Account Longs
Gross Short Quantity	Gross Short Qty	Position Difference Account Shorts
Pure Net Quantity Difference	Excess Net Qty	Pure Net Clearing vs. Submitted Net Quantity Difference
Recon Description	Recon Description	Description of Match or Mismatch Type for the Contract

Appendix B – CME Group Margin Result File Output Layout

Note that this report is not used for data processing by the firm. It is meant to be a human-readable account of margin results calculated, customer account by customer account, in Clearing.

Field	Column Header	Description
Business Date	Bus_Date	Business date on which reconciliation took place
Clearing Org	CO	Clearing Organization (CME)
Clearing Member Firm	CMF	Overall CME Group Firm ID
Customer Account	Cust_Acct	Customer Account ID
Account Type	AcctTyp	Customer Account type (M, H, S, O, Q)
Parent Account	ParentAcct	Omnibus Account to which the Customer Account Belongs
Performance Bond Account	PBA	Performance Bond (Margin) Account at CME Clearing
Segregation Type	Seg	Segregation Type (Customer = "CUST", House = "HOUS")
Segregation Account	SA	Segregation Account at CME Group
	FSeg	
Margin Level	Level	Margin Level (Overall = "O", Breakout = "B")
Currency	Ccy	Currency of the requirement
Base Requirement	Base_Rqmnt	Base Margin Requirement
Concentration Requirement	Conc_Rqmnt	Concentration Margin Requirement
Initial Margin, Maintenance	IM-Maint	Maintenance Level Margin Requirement
Initial Margin, Initial	IM_Init	Initial Level Margin Requirement (Same as Maint for CGM)
Net Option Value	NOV	Net Option Value (Long Option Value – Short Option Value)
FX Rate	FX Rate	Currency Conversion Rate (to USD)
Currency Equivalent	Ccy_Equiv	Currency Equivalent
Initial Margin, Maintenance Equivalent	IM_Maint_Equiv	USD-Equivalent Maintenance Level Margin Requirement
Initial Margin, Initial Equivalent	IM_Init_Equiv	USD-Equivalent Maintenance Level Margin
Net option Value Equivalent	NOV_Equiv	USD-Equivalent Net Option Value

###