



FIA Survey of Exchange-Provided Electronic Trading Risk Mitigation Controls

FIA has committed to building a central repository of exchange-provided controls and practices. To do so, this survey has been developed in consultation with FIA members. The survey has been sent to 70+ exchanges globally and the central repository will present, in an exchange-by-exchange format, a view of the answers provided. We believe that the repository will provide a convenient, central source of exchange-provided controls and practices for global brokers, clearing firms and traders, as well as facilitating risk control benchmarking for exchanges.

The survey is in an editable excel format which will allow you to enter and save your responses and when complete to return to us at ExchangeRiskControlsSurvey@fia.org.

As you are completing the survey, should you have any questions or concerns, please contact us at ExchangeRiskControlsSurvey@fia.org.

FIA Privacy Statement <https://www.fia.org/fia-and-ifm-privacy-statement>

Contact Information

1	Exchange Name <i>As you would like it to appear on the FIA website</i>	Cboe Futures Exchange, LLC
2	Name of person completing the survey <i>First name Last name (i.e John Smith)</i> <i>For FIA internal use only</i>	
3	Email of person completing the survey <i>For FIA internal use only</i>	
4	Name/Department for FIA members to find additional information <i>For FIA internal use only</i>	
5	Email for FIA members to find additional information <i>This will be published on the FIA website</i>	cfetradedesk@cboe.com
6	Website URL for FIA members to find additional information <i>This will be published on the FIA website</i>	https://www.cboe.com/us/futures/

Introductory Question

7	Does the Exchange allow direct market access? <i>Check all that apply</i>	
7.a	Direct access for Clearing Members	☒
7.b	Direct access for Traders sponsored by Clearing Members/Sponsoring Firms	☒
7.c	Direct access for any Trader who wants it	☐
7.d	Direct access via a Clearing Member's/Sponsoring Firms infrastructure	☐

Exchange-Provided Risk Management Tools

The following questions pertain to Exchange-Provided Risk Management Tools Configurable by Clearing Members/Sponsoring Firms and Traders

8	Does the Exchange make maximum order size limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can they be set? <i>Check all that apply</i>	
8.a	Not Applicable	☐
8.b	Available to set manually	☒
8.c	Available to set via API	☒
8.d	Is this a mandatory control	☒
9	If mandatory, provide rule citation	CFE Rule 513A(b)
10	Does the Exchange make maximum intraday net position limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can they be set? <i>Check all that apply</i>	
10.a	Not applicable	☐
10.b	Available to set manually	☒
10.c	Available to set via API	☒
10.d	Is this a mandatory control?	☒
11	If mandatory provide rule citation	CFE Rule 513A(c) Futures Only
12	Does the Exchange make maximum intraday gross position limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can they be set? <i>Check all that apply</i>	
12.a	Not applicable	☒
12.b	Available to set manually	☐
12.c	Available to set via API	☐
12.d	Is this a mandatory control	☐
13	If mandatory provide rule citation	
14	Does the Exchange make maximum intraday notional value limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can they be set? <i>Check all that apply</i>	
14.a	Not applicable	☐
14.b	Available to set manually	☒
14.c	Available to set via API	☐
14.d	Is this a mandatory control?	☒
15	If mandatory provide rule citation	CFE Rules 513A(j)(i)(B) and 513A(j)(iii) Options on Futures Only
16	Does the Exchange make maximum intraday margin utilization/buying power limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can they be set? <i>Check all that apply</i>	
16.a	Not applicable	☒
16.b	Available to set manually	☐
16.c	Available to set via API	☐
16.d	Is this a mandatory control?	☐
17	If mandatory provide rule citation	

18	Does the Exchange make maximum intraday loss available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
18.a	Not applicable	☒
18.b	Available to set manually	☐
18.c	Available to set via API	☐
18.d	Is this a mandatory control	☐
19	If mandatory provide rule citation	
20	Does the Exchange make maximum number of open orders available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
20.a	Not applicable	☒
20.b	Available to set manually	☐
20.c	Available to set via API	☐
20.d	Is this a mandatory control?	☐
21	21 If mandatory provide rule citation	
22	Does the Exchange make restricted list management available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
22.a	Not applicable	☐
22.b	Available to set manually	☒
22.c	Available to set via API	☒
22.d	Is this a mandatory control?	☒
23	If mandatory provide rule citation CFE Rule 513A(b)	
24	Does the Exchange make order/quote volume limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
24.a	Not applicable	☐
24.b	Available to set manually	☒
24.c	Available to set via API	☒
24.d	Is this a mandatory control?	☒
25	If mandatory provide rule citation CFE Rule 513A(b)	
26	Does the Exchange make user defined price collars available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
26.a	Not applicable	☐
26.b	Available to set manually	☒
26.c	Available to set via API	☒
26.d	Is this a mandatory control?	☒
27	If mandatory provide rule citation CFE Rule 513A(d) Price collars for Options on Futures are Exchange defined	
28	Does the Exchange make number of outstanding orders/quotes available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
28.a	Not applicable	☒
28.b	Available to set manually	☐
28.c	Available to set via API	☐
28.d	Is this a mandatory control?	☐
29	If mandatory provide rule citation	

30	Does the Exchange make outstanding orders/quotes volume limits available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
30.a	Not applicable	☐
30.b	Available to set manually	☒
30.c	Available to set via API	☒
30.d	Is this a mandatory control?	☒
31	If mandatory provide rule citation	CFE Rule 513A(c) Futures Only
32	Does the Exchange make number of messages per time interval available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
32.a	Not applicable	☐
32.b	Available to set manually	☒
32.c	Available to set via API	☐
32.d	Is this a mandatory control?	☒
33	If mandatory provide rule citation	CFE Rule 513A(h)
34	Does the Exchange make message volume per time interval available to Clearing Members/Sponsoring Firms and Traders, and if so, how can it be set? <i>Check all that apply</i>	
34.a	Not applicable	☐
34.b	Available to set manually	☒
34.c	Available to set via API	☐
34.d	Is this a mandatory control?	☒
35	If mandatory provide rule citation	CFE Rule 513A(h)
36	Are there any other pre-trade risk control tools that the Exchange makes available to Clearing Members/Sponsoring Firms and Traders, and if so, how can they be set?	CFE offers default Limit Up/Limit Down bands during Extended Hours trading and orders are rejected if priced outside of the bands. In addition to Exchange set and user specified price collars on limit orders, CFE offers default market order protection that rejects a market order if the prevailing market is wider than an acceptable Threshold Width and limits the extent to which a market order that is partially executed can be further executed above or below the initial price level. Futures spread instruments on CFE will transition to a queuing (non-trading) state when any one of the individual legs is quoted wider than an acceptable Threshold Width. CFE offers maximum notional value order size limits that may be set by Clearing Members and Traders for Options on Futures. CFE also offers market order protection for market orders in no-bid (offer) options on futures series in which market orders are permitted and an all buy legs spread order price reasonability check for options on futures, a debit/credit spread order price reasonability check for options on futures, and an acceptable price range spread order price reasonability check for options on futures.

37	Does the Exchange allow Clearing Members/Sponsoring Firms and Traders to set separate hard and soft limits?	☐ Yes ☒ No
38	If yes, is the setting of separate hard and soft limits mandatory?	☐ Yes ☐ No
39	If mandatory, provide rule citation.	
40	Does the Exchange make maximum order size limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
40.a	Not applicable	☐
40.b	Available to set by asset class	☐
40.c	Available to set by product group	☐
40.d	Available to set by product	☒
40.e	Available to set by spread	☐
40.f	Available to set by expiry	☐
40.g	Other	
41	Does the Exchange make maximum intraday net position limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
41.a	Not applicable	☐
41.b	Available to set by asset class	☐
41.c	Available to set by product group	☐
41.d	Available to set by product	☒
41.e	Available to set by spread	☐
41.f	Available to set by expiry	☐
41.g	Other	Futures Only
42	Does the Exchange make maximum intraday gross position limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
42.a	Not applicable	☒
42.b	Available to set by asset class	☐
42.c	Available to set by product group	☐
42.d	Available to set by product	☐
42.e	Available to set by spread	☐
42.f	Available to set by expiry	☐
42.g	Other	
43	Does the Exchange make maximum intraday notional value limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
43.a	Not applicable	☐
43.b	Available to set by asset class	☐
43.c	Available to set by product group	☐
43.d	Available to set by product	☒
43.e	Available to set by spread	☐
43.f	Available to set by expiry	☐
43.g	Other	Options on Futures Only

44	Does the Exchange make maximum intraday margin utilization/buying power limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
44.a	Not applicable	☒
44.b	Available to set by asset class	☐
44.c	Available to set by product group	☐
44.d	Available to set by product	☐
44.e	Available to set by spread	☐
44.f	Available to set by expiry	☐
44.g	Other	
45	Does the Exchange make maximum intraday loss available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
45.a	Not applicable	☒
45.b	Available to set by asset class	☐
45.c	Available to set by product group	☐
45.d	Available to set by product	☐
45.e	Available to set by spread	☐
45.f	Available to set by expiry	☐
45.g	Other	
46	Does the Exchange make maximum number of open orders available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
46.a	Not applicable	☒
46.b	Available to set by asset class	☐
46.c	Available to set by product group	☐
46.d	Available to set by product	☐
46.e	Available to set by spread	☐
46.f	Available to set by expiry	☐
46.g	Other	
47	Does the Exchange make restricted list management available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
47.a	Not applicable	☐
47.b	Available to set by asset class	☐
47.c	Available to set by product group	☐
47.d	Available to set by product	☒
47.e	Available to set by spread	☐
47.f	Available to set by expiry	☐
47.g	Other	
48	Does the Exchange make order/quote volume limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
48.a	Not applicable	☐
48.b	Available to set by asset class	☐
48.c	Available to set by product group	☐
48.d	Available to set by product	☒
48.e	Available to set by spread	☐
48.f	Available to set by expiry	☐
48.g	Other	

49	Does the Exchange make user defined price collars available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
49.a	Not applicable	☐
49.b	Available to set by asset class	☐
49.c	Available to set by product group	☐
49.d	Available to set by product	☒
49.e	Available to set by spread	☐
49.f	Available to set by expiry	☐
49.g	Other	Price collars for Options on Futures are Exchange defined
50	Does the Exchange make number of outstanding orders/quotes available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
50.a	Not applicable	☒
50.b	Available to set by asset class	☐
50.c	Available to set by product group	☐
50.d	Available to set by product	☐
50.e	Available to set by spread	☐
50.f	Available to set by expiry	☐
50.g	Other	
51	Does the Exchange make outstanding order/quote volume limits available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
51.a	Not applicable	☐
51.b	Available to set by asset class	☐
51.c	Available to set by product group	☐
51.d	Available to set by product	☒
51.e	Available to set by spread	☐
51.f	Available to set by expiry	☐
51.g	Other	Futures Only
52	Does the Exchange make message volume per time interval available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
52.a	Not applicable	☐
52.b	Available to set by asset class	☐
52.c	Available to set by product group	☐
52.d	Available to set by product	☐
52.e	Available to set by spread	☐
52.f	Available to set by expiry	☐
52.g	Other	Set at Port (match capacity allocation) Level
53	Does the Exchange make number of messages per time interval available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set? <i>Check all that apply</i>	
53.a	Not applicable	☐
53.b	Available to set by asset class	☐
53.c	Available to set by product group	☐
53.d	Available to set by product	☐
53.e	Available to set by spread	☐
53.f	Available to set by expiry	☐
53.g	Other	Set at Port (match capacity allocation) Level

54	Are there any other pre-trade risk control tools that the Exchange makes available to Clearing Members/Sponsoring Firms and Traders, and if so, at what product level can they be set?	CFE sets product level Limit Up/Limit Down bands during Extended Hours trading where orders are rejected if priced outside of the bands. In addition to Exchange set and user specified price collars on limit orders, CFE offers default market order protection that rejects a market order if the prevailing market is wider than an acceptable Threshold Width. It also limits the extent to which a market order that is partially executed can be further executed above or below the initial price level. Spread instruments on CFE will transition to a queuing (non-trading) state when any one of the individual legs is quoted wider than an acceptable Threshold Width. All of these risk controls apply at the product level.
55	At what user level does the Exchange allow pre-trade risk control tools to be set? <i>Check all that apply</i>	
55.a	Clearing Firm/Sponsoring Firm Default	☒
55.b	Trader Firm	☐
55.c	Trader Account Number	☐
55.d	Trader/User Login	☒
55.e	Trader defined desk/Strategy group	☐
55.h	Other	
56	Does the Exchange have 'clone user' functionality which allows for the copying/mirroring of controls from one Trader, group, firm etc. to another?	☒ Yes ☐ No
57	If yes, does the functionality allow for choosing what components to clone rather than cloning everything?	☒ Yes ☐ No
58	Does the Exchange allow Clearing Member/Sponsoring Firm administrators to raise or lower limits during the trading day?	☒ Yes ☐ No
59	Does the Exchange allow Trader administrators to raise or lower limits during the trading day?	☒ Yes ☐ No
60	Does the Exchange offer post-trade surveillance tools?	☒ Yes ☐ No
61	If yes, which of the following are available? <i>Check all that apply</i>	
61.a	Repeated execution alerts/controls	☐
61.b	Volume per time interval controls	☒
61.c	Other	In addition to volume per time intervals for both Futures and Options on Futures (OOF) products, CFE offers the following unique post-trade limits for Options on Futures products: Trade count per time interval, Total notional per time interval, Percentage of quote per time interval.
62	Does the Exchange offer configurable price tolerance levels?	☒ Yes ☐ No
63	If yes, how is the logic designed? <i>Check all that apply</i>	
63.a	Price Deviation	☒
63.b	Market Depth Protection	☒
63.c	Price Drift Control	☐
63.d	Market Order Disabled	☒
63.e	Other	Limit Up/Limit Down protection. Limit order protection. No market orders allowed or no market orders allowed during extended trading hours in certain products.

64	Does the Exchange provide self-match prevention tools configurable by both the Clearing Member/Sponsoring Firm and the Trader?	☒ Yes ☐ No
65	If yes, which of the following features are available? <i>Check all that apply</i>	
65.a	New order cancels entire resting order	☒
65.b	New order cancels only same quantity of resting order	☐
65.c	New order is canceled, resting order remains	☒
65.d	Both new order and resting order are cancelled	☒
65.e	Order will execute against each other but not print	☐
65.f	Configurable only by Trader	☒
65.g	Configurable only by Clearing Member/Sponsoring Firm	☐
65.h	Other	
66	If yes, at what levels can the controls be set <i>Check all that apply</i>	
66.a	Member level firm	☒
66.b	Group level	☒
66.c	Trader ID level	☒
66.d	Member ID level	☐
66.e	Customer Account Level	☐
66.f	Strategy Level	☐
66.g	Session ID level	☐
67	What other services does the Exchange offer Clearing Members/Sponsoring Firms to assist with risk management? <i>Check all that apply</i>	
67.a	Drop copy feeds	☒
67.b	Kill switches	☒
67.c	Independent order management tool	☒
67.d	Cancel on disconnect	☒
67.e	Order cancel (on behalf)	☐
67.f	Mass cancel (on behalf)	☒
67.g	Non-exchange infrastructure order/trade feed (web etc.)	☒
67.h	Ability to cancel delayed orders (as used in matching engine-based speed bumps)	☐
67.i	Other	
68	What other services does the Exchange offer Traders to assist with risk management? <i>Check all that apply</i>	
68.a	Drop copy feeds	☒
68.b	Kill switches	☒
68.c	Independent order management tool	☒
68.d	Cancel on disconnect	☒
68.e	Order cancel (on behalf)	☒
68.f	Mass cancel (on behalf)	☒
68.g	Non-exchange infrastructure order/trade feed (web etc.)	☒
68.h	Ability to cancel delayed orders (as used in matching engine-based speed bumps)	☐
68.i	Other	Cancel on Disconnect functionality includes Cancel on Port (Match Capacity Allocation) Disconnect, Cancel on Matching Engine Disconnect, and Cancel on Drop Disconnect functionality. CFE also offers Cancel on Reject functionality.

69	If the Exchange makes a “drop copy” feed available, what information is contained in the feed? <i>Check all that apply</i>	
69.a	Order Acknowledgements	☒
69.b	Filled Orders	☒
69.c	New orders	☒
69.d	Order Amendments	☒
69.e	Order Cancellations	☒
69.f	Reject messages	☒
69.g	Time stamps for all events	☒
69.h	Order numbers for all events	☒
69.i	Other	CFE offers drop copy feeds that provide executions as well as order drop copy feeds that provide all electronic order messaging.
70	If the Exchange offers a Kill Switch to Clearing Members/Sponsoring Firms , how is it implemented? <i>Check all that apply</i>	
70.a	Manually triggered and reset using exchange- provided administration tool	☒
70.b	Triggered and reset using an exchange-provided API	☒
70.c	Automated kill switch triggered by exchange defined parameters	☐
70.d	Other	
71	If triggered and not reset intraday, does the exchange automatically reset the Kill Switch?	☒ Yes ☐ No
72	If triggered and not reset intraday, does the exchange require the Kill Switch to be manually reset?	☐ Yes ☒ No
73	If the Exchange offers a Kill Switch to Traders , how is it implemented? <i>Check all that apply</i>	
73.a	Manually triggered and reset using exchange provided administration tool	☒
73.b	Triggered and reset using an exchange provided API	☒
73.c	Automated kill switch triggered by exchange defined parameters	☐
73.d	Other	Kill Switch can be initiated by Exchange Connection protocols if initiated by Trading Privilege Holders. A Kill Switch automatically resets at the start of the next business day. The Kill Switch needs to be triggered again at the beginning of the next business day to keep it in place for that business day or other risk controls may be used after the initial triggering of the Kill Switch to prevent subsequent submission of additional orders over multiple business days.
74	If triggered and not reset intraday, does the exchange automatically reset the Kill Switch?	☒ Yes ☐ No
75	If triggered and not reset intraday, does the exchange require the Kill Switch to be manually reset?	☒ Yes ☐ No
76	If the Exchange provides independent order management capability, how is it provided? <i>Check all that apply</i>	
76.a	Manually using an exchange-provided administration tool?	☒
76.b	Automated by API	☐
76.c	Other	

77	If the Exchange provides independent order management capability, does it enable the following by phone ? <i>Check all that apply</i>	
77.a	Ability to review all orders	☐
77.b	Ability to review fill information for the day, including partial fills	☐
77.c	Ability to review cancel and replace history	☐
77.d	Ability to review timestamps	☐
77.e	Ability to cancel individual orders	☐
77.f	Ability to cancel groups of orders	☐
77.g	Ability to cancel all working orders with a single command	☐
77.h	Other	Trade support is available via phone for clients to status and cancel orders.
78	If the Exchange provides independent order management capability, does it enable the following by portal ? <i>Check all that apply</i>	
78.a	Ability to review all orders	☒
78.b	Ability to review fill information for the day, including partial fills	☒
78.c	Ability to review cancel and replace history	☒
78.d	Ability to review timestamps	☒
78.e	Ability to cancel individual orders	☒
78.f	Ability to cancel groups of orders	☒
78.g	Ability to cancel all working orders with a single command	☒
78.h	Other	
79	If the Exchange offers cancel on disconnect at the session level, please specify whether it is mandatory or discretionary	☐ Mandatory ☒ Discretionary
80	If Mandatory, provide rule citation	

General Exchange Pre-Trade Risk Controls

The following questions pertain to Exchange Pre-Trade Risk Controls Generally.

81	If the Exchange provides pre-trade control tools, where do each of the tools reside?					
		Gateway	Matching engine	Other	Not Applicable	
81.a	Maximum order size limits	☐	☒	☐	☐	
81.b	Maximum intraday net position limits	☐	☒	☐	☐	
81.c	Maximum intraday gross position limits	☐	☐	☐	☐	
81.d	Maximum intraday notional value limits	☐	☒	☐	☐	
81.e	Maximum intraday margin utilization/buying power limits	☐	☐	☐	☐	
81.f	Maximum intraday loss	☐	☐	☐	☐	
81.g	Maximum number of open orders	☐	☐	☐	☐	
81.h	Restricted list management	☐	☒	☐	☐	
81.i	Order/Quote volume limits	☐	☒	☐	☐	
81.j	User defined price collars	☐	☒	☐	☐	
81.k	Number of outstanding order/quote limits	☐	☐	☐	☐	
81.l	Outstanding orders/quotes volume limits	☐	☒	☐	☐	
81.m	Number of messages per time interval	☒	☐	☐	☐	
81.n	Message volume per time interval	☐	☒	☐	☐	
82	If the Exchange provides any other pre-trade control tools, what are these, and where do each of the tools reside?		Limit Up/Limit Down Bands, Market Order Protection, spread threshold width checks are also available and the controls are on our matching engine.			
83	If the Exchange provides pre-trade control tools, what happens when each limit is hit?					
		Reject Order	Pause Order	Shut Down Session	Other	Not Applicable
83.a	Maximum order size limits	☒	☐	☐	☐	☐
83.b	Maximum intraday net position limits	☒	☐	☐	☐	☐
83.c	Maximum intraday gross position limits	☐	☐	☐	☐	☐
83.d	Maximum intraday notional value limits	☒	☐	☐	☐	☐
83.e	Maximum intraday margin utilization/buying power limits	☐	☐	☐	☐	☐
83.f	Maximum intraday loss	☐	☐	☐	☐	☐
83.g	Maximum number of open orders	☐	☐	☐	☐	☐
83.h	Restricted list management	☒	☐	☐	☐	☐
83.i	Order/Quote volume limits	☐	☐	☐	☐	☐
83.j	User defined price collars	☒	☐	☐	☐	☐
83.k	Number of outstanding order/quote limits	☐	☐	☐	☐	☐
83.l	Outstanding orders/quotes volume limits	☒	☐	☐	☐	☐
83.m	Number of messages per time interval	☒	☐	☐	☐	☐
83.n	Message volume per time interval	☒	☐	☐	☐	☐

84	Are there any other details that you would like to provide on the above question?	CFE interpreted its Maximum Order Size Limits risk control under CFE Rule 513A(b) to provide the ability to implement Restricted List Management and Order/Quote Volume Limits. CFE interpreted its Net Long and Net Short Limits risk control under CFE Rule 513A(c) to provide the ability to implement Outstanding Order/Quote Volume Limits. CFE interpreted its Execution Rate Limits risk control under CFE Rule 513A(g) to provide the ability to implement Message Volume Per Time Interval.
85	If the Exchange provides margin utilization/buying power control limits, how is the margin calculated?	
86	Does the Exchange have a risk controls portal available for Clearing Member / Sponsoring Firm and Trader viewing?	☒ Yes ☐ No
87	Does the Exchange set default risk controls if nothing is set by the Clearing Member / Sponsoring Firm or Trader?	☐ Yes ☒ No
	If the Exchange provides pre-trade control tools, what is the sequence of events when a pre-trade control check is performed?	
88	The order is already in the matching engine queue and then the control check is performed ("out of-line check") The control check is performed before the order reaches the matching engine and gets queued ("in-line check")	☒ ☐
89	If the Exchange provides pre-trade control tools, are the pre-trade controls in the critical path even if they are optional (i.e., is the code still called)?	☒ Yes ☐ No
90	If the Exchange provides pre-trade control tools, do any of the controls add latency?	☐ Yes ☒ No
91	If yes, what is the latency added?	
92	If the Exchange provides pre-trade control tools, how are users notified if the controls are not operating as intended?	The Exchange will receive alerts on the platform that pre-trade risk controls are not loaded or are not working properly. The Exchange will then inform the trading community of the general issue.
93	If the Exchange provides pre-trade control tools, how quickly do changes to the controls go into effect?	They can be made effective immediately.
94	If the Exchange provides pre-trade control tools, is there a notification that the controls have been changed?	☒ Yes ☐ No
95	If yes, please provide specifics	We have log viewer messaged internally that indicates to the exchange operations team that risk controls have been changed. We also have tooling within the pre-trade risk control itself that indicates which Trader identifier has had risk controls changed.
96	If the Exchange provides pre-trade control tools, are previous control settings stored?	☒ Yes ☐ No
97	If yes, provide specifics on what information is stored and for how long	Pre-trade risk controls are stored and archived by the Exchange according to our Exchange Records Retention Policy.
98	If the Exchange provides pre-trade control tools is an audit trail of controls entered and controls changed available?	☒ Yes ☐ No

Exchange Market Integrity Controls

The following questions pertain to Exchange Market Integrity Controls.

99	What controls does the Exchange set to prevent market disruption? Please indicate whether the controls are "available" or "mandatory."	
		Available Mandatory
99.a	Dynamic price banding	☐
99.b	Market pauses or halts	☒
99.c	Message policies	☒
99.d	Message throttles	☐
99.e	Kill switches	☒
99.f	Cancel on disconnect	☒
99.g	Error policies	☐
100	If any of the above are mandatory, please provide the rule citation in each case.	Dynamic price banding: CFE Rules 1202(i)(i), 1302(l)(i), 1502(i)(i), and 1702(l)(i). Market pauses or halts: CFE Rules 417, 417A, and 418. Message throttles: CFE Rule 513A(h). Error policies: CFE Rule 416 and Policy and Procedure III of the Policies and Procedures Section of the CFE Rulebook.
101	If the Exchange has dynamic price banding, does it enable the following? <i>Check all that apply</i>	
101.a	Limits differentiated on specific characteristics of a product	☒
101.b	Limit differentiated based on specific conditions of the market	☐
101.c	Limits that can be adapted intraday	☒
101.d	Other	Limit Up/ Limit Down Limits are based upon the prior day's daily settlement value. The limits may apply to specific futures products and during specific trading hours.
102	If the Exchange has market pauses or halts, what specific events trigger such halts? <i>Check all that apply</i>	
102.a	Orders outside a given price deviations for a given financial instrument	☐
102.b	Change in volatility over a specified time interval for a given financial instrument	☒
102.c	Other	CFE configures Limit Up/Limit Down bands for some products, established from the prior day's settlement price. Orders priced outside these thresholds will be rejected or cancelled back to the TPH. Additionally, CFE products based on securities indexes are subject to Market Wide Circuit Breaker (MWCBC) halts during regular trading hours in conjunction with the MWCBC halts applicable in the U.S. equities markets.
103	If the Exchange applies a market pause or halt for a specific financial instrument, does it coordinate halts with:	
103.a	Related financial instruments on the same exchange	☒
103.b	Related financial instruments on other exchanges	☒
104	If the Exchange has market pauses or halts, how is price discovery re-established after the event? <i>Check all that apply</i>	
104.a	Resume continuous trading	☐
104.b	An intraday auction period	☒
104.c	Other	

105	If the Exchange has market pauses or halts, how is the event communicated to market participants? <i>Check all that apply</i>	
105.a	Email	☒
105.b	Website	☒
105.c	Other	
106	If the Exchange has market pauses or halts, are the parameters that trigger such events available publicly? <i>Check all that apply</i>	
106.a	Website	☒
106.b	On request	☒
106.c	Other	
107	If the Exchange offers cancel on disconnect functionality, is it enabled by default?	☒ Yes ☐ No
108	If the Exchange has an error policy, what is the approach to “single trade” error trades? <i>Check all that apply</i>	
108.a	Let the trade stand if with defined range	☒
108.b	Let the trade stand if within specified time limit	☒
108.c	Adjust the price if it is outside a certain range	☒
108.d	Cancel/bust the trade if it outside a certain range	☒
108.e	Other	The Exchange generally adjusts prices if outside the non-reviewable range. If the adjustment of an error trade involving the execution of a Limit Order with a Customer Type Indicator Code of 4 would result in an adjusted trade price for the transaction that is greater than the limit price of the Limit Order if it was an Order to buy or that is less than the limit price of the Limit Order if it was an Order to sell, the Trade Desk will not adjust the trade and instead is authorized in its sole discretion to bust the trade.
109	If the Exchange has an error policy, what is the approach to “mass trade” error trades? <i>Check all that apply</i>	
109.a	Let trade stand if with defined range	☒
109.b	Let trade stand if within specified time limit	☒
109.c	Adjust price if outside a certain range	☒
109.d	Cancel/bust trade if outside a certain range	☒
109.e	Other	The Exchange generally adjusts prices if outside the non-reviewable range. If the adjustment of an error trade involving the execution of a Limit Order with a Customer Type Indicator Code of 4 would result in an adjusted trade price for the transaction that is greater than the limit price of the Limit Order if it was an Order to buy or that is less than the limit price of the Limit Order if it was an Order to sell, the Trade Desk will not adjust the trade and instead is authorized in its sole discretion to bust the trade.
110	If the Exchange’s error trade policy adjusts prices outside of a certain range, what is the approach for determining that range?	For a trade that is adjusted because the trade is found to be outside the non-reviewable range, the execution price of the trade is adjusted to the bound of the non-reviewable range (except that if the adjustment would result in a trade price that is through the limit price of a limit order with Customer Type Indicator 4, the trade may be busted rather than adjusted).

111	Are all products subject to the same approach or do some products inherit the same range as other similar products? <i>For example, does a calendar spread product inherit the range from the corresponding outright product? Or is the range for that calendar spread product assessed on its own merit?</i>	The no bust range is set by product and may be different for different products. Spread orders have the same no bust range as the corresponding outright product.
112	How often are these ranges reviewed to ensure they offer appropriate protection?	The Exchange periodically reviews these ranges as appropriate.
113	How often has the error trade policy been invoked in the past 12 months, and what were the circumstances for each?	The CFE error trade policy has been invoked 8 times in the past 12 months to bust a block trade or exchange of contract for related position transaction inputted with a mistake, inaccuracy, or error. CFE has invoked the error trade policy in 3 instances on electronically executed trades within the past 12 months.
114	Does the Exchange have a clearly defined dispute resolution forum in case of error trades?	☒ Yes ☐ No
115	If yes, what is the forum and dispute resolution process	The dispute resolution process is governed by the arbitration provisions of Chapter 8 of the CFE Rulebook which provides that arbitrations are administered by National Futures Association under its arbitration rules.

Exchange Certification and Testing Environments		
The following questions pertain to Exchange Market Integrity Controls.		
116	Does the Exchange provide a certification environment for certifying vendor and proprietary trading systems?	☒ Yes ☐ No
117	If the Exchange provides a certification environment, which specific functions must be certified? <i>Check all that apply</i>	
117.a	Ability of the system to communicate with the exchange	☒
117.b	Specific trading functionality offered by the system	☒
117.c	Specific risk functionality offered by the system	☒
117.e	Other	
118	Does the Exchange provide one certification environment for current production and another environment for the next version of production?	☐ Yes ☒ No
119	If yes, what is the availability of the certification environment?	
120	How closely does the certification environment mirror the production environment?	
120.a	Exact duplicate with mirrored synthetic market activity from production	☒
120.b	Exact duplicate without mirrored market activity, only activity from other certification activity	☐
120.c	Other	
121	Does the Exchange offer a test symbol in the production environment to enable the entry of test trades in production without impacting actual markets?	☒ Yes ☐ No
122	If the Exchange offers a certification environment, which of the following tests can be performed in this environment? <i>Check all that apply</i>	
122.a	Unit testing	☒
122.b	Functional testing (integration, regression)	☒
122.c	Non-functional testing (load, stress, performance, scalability)	☐
122.d	Acceptance testing	☒
123	If the Exchange offers a certification environment, which of the following actions can be performed in this environment? <i>Check all that apply</i>	
123.a	Send a test order	☒
123.b	Send a cancel of the test order	☒
123.c	Test all order types (blocks, crosses, etc.)	☒
123.d	Receive confirmation of a cancellation of test order	☒
123.e	Receive confirmation of partial execution of the test order and cancellation	☒
123.f	Receive confirmation of full execution of the test order and cancellation	☒
123.g	Receive confirmation of rejection of the test order	☒
123.h	Receive confirmation of enabled risk controls working in the environment	☒
123.i	Test pre-trade risk control functionality	☒
124	How are certification and live environments segregated? <i>i.e., Are applicable orders (test or live) going over the same wires such that a configuration error can have a major impact?</i>	Certification and production environments can be accessed from the same physical network connection to CFE. However, the environments are configured with distinct IP address ranges and authentication criteria (i.e. passwords). In addition, production access to any order entry ports is restricted to only source IP address subnets that have been communicated by the Trading Privilege Holder to the Exchange. Connection attempts sourcing from unknown IP address subnets are blocked.

General Information		
125	Does the Exchange provide information on the following to the public via website/exchange portal? <i>Check all that apply</i>	
125.a	Risk control tools provided by the Exchange to Traders	☒
125.b	Risk control tools provided by the Exchange to Clearing Members/Sponsoring Firms	☒
125.c	Mechanisms used by the Exchange to protect market integrity	☒
126	Does the Exchange verify Exchange set market integrity control settings to ensure that the values would prevent a market disruption?	☒ Yes ☐ No
127	Does the Exchange test and validate all Exchange provided risk control tools to ensure that they are operating properly?	☒ Yes ☐ No
128	Is there any additional information that you would like to provide on the Exchange's risk control tools?	CFE offers Traders the ability to designate the following options on futures risk monitor parameters by Executing Firm ID (EFID) and options on futures product: (1) number of contracts executed; (2) notional value of executions; (3) number of executions; and (4) number of contracts executed as a percentage of number of contracts outstanding. Traders may establish these parameters over a time period established by the Trader or on an absolute basis for a trading day. Clearing Members also have the ability to designate absolute notional value limits by EFID and product for options on futures. These parameters are triggered on a post-trade basis. Additional information regarding CFE's various risk controls is available in the CFE Rulebook (https://cdn.cboe.com/resources/regulation/rule_book/cfe-rule-book.pdf), including in particular in CFE Rule 513A; the Policies and Procedures Section of the CFE Rulebook (https://cdn.cboe.com/resources/regulation/rule_book/CFEPoliciesandProcedures.pdf); and the CFE Risk Management Specification (https://cdn.cboe.com/resources/membership/CBOE_FUTURES_EXCHANGE_RISK_MANAGEMENT_SPECIFICATION.pdf)