**COMMODITY FUTURES TRADING COMMISSION**

**17 CFR Part 38**

**RIN [_____]**

# Electronic Trading Risk Principles

**AGENCY:** Commodity Futures Trading Commission.

**ACTION:** Final rule.

**SUMMARY:** The Commodity Futures Trading Commission ("Commission" or "CFTC") is adopting final rules amending its part 38 regulations to address the potential risk of a designated contract market's ("DCM") trading platform experiencing a market disruption or system anomaly due to electronic trading. The final rules set forth three principles applicable to DCMs concerning: (i) the implementation of exchange rules applicable to market participants to prevent, detect, and mitigate market disruptions and system anomalies associated with electronic trading; (ii) the implementation of exchange-based pre-trade risk controls for all electronic orders; and (iii) the prompt notification of Commission staff by DCMs of any significant market disruptions on their electronic trading platforms. In addition, the final rules include acceptable practices ("Acceptable Practices"), which provide that a DCM can comply with these principles by adopting and implementing rules and risk controls reasonably designed to prevent, detect, and mitigate market disruptions and system anomalies associated with electronic trading.

**DATES:**

*Effective date*: The rules will become effective on the date of publication in the Federal Register.

*Compliance date*: DCMs must be in full compliance with the requirements of this rule within 180 calendar days after the effective date.

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### A. Purpose and Structure of the Risk Principles

The Commission is adopting final rules establishing a set of principles ("Risk Principles") and related Acceptable Practices applicable to DCMs for the purpose of preventing, detecting, and mitigating market disruptions and system anomalies associated with the entry of electronic orders and messages into DCMs' electronic trading platforms. Such market disruptions or anomalies originating at a market participant may negatively impact the proper functioning of a DCM's trading platform by limiting the ability of other market participants to trade, engage in price discovery, or manage risk.

The Commission, DCMs, and market participants all have an interest in the effective prevention, detection, and mitigation of market disruptions and system anomalies associated with electronic trading. As discussed in the notice of proposed rulemaking for the Electronic Trading Risk Principles ("NPRM")[1] and noted by several NPRM commenters, the Commission believes that DCMs are addressing most, if not all, of the electronic trading risks currently presented to their trading platforms. DCMs and other market participants have worked together to better understand electronic trading risks and adapt risk control systems through the use of new technological tools and safety procedures, such as "fat finger" controls, dynamic price collars, kill switches, cancel-on-disconnect, drop copy feeds, self-match prevention, and granular pre-trade controls to manage limits within a product group.[2] Since April 2010, FIA has published six papers proposing industry best practices and guidelines related to identifying risks and strengthening safeguards related to electronic trading in the futures markets.[3]

The Risk Principles will require DCMs to continue to monitor these risks as they evolve along with the markets, and make reasonable modifications as appropriate. The Risk Principles reflect a flexible approach that complements industry-led initiatives and previous Commission measures to address market disruption risk. The Risk Principles provide further regulatory clarity to market participants while preserving the DCMs' ability to adapt to evolving technology and markets.

## B. TAC Meeting

[1] Electronic Trading Risk Principles, 85 FR 42761 (July 15, 2020). NPRM commenters were as follows: Americans for Financial Reform Education Fund ("AFR"), Better Markets, Inc. ("Better Markets"), CBOE Futures Exchange, LLC ("CFE"), CME Group Inc. ("CME"), Commercial Energy Working Group ("CEWG"), Futures Industry Association and FIA Principal Traders Group ("FIA/FIA PTG"), Institute for Agriculture and Trade Policy ("IATP"), Intercontinental Exchange Inc. ("ICE"), International Swaps and Derivatives Association, Inc. and Securities Industry and Financial Markets Association ("ISDA/SIFMA"), Managed Funds Association ("MFA"), Minneapolis Grain Exchange, Inc. ("MGEX"), and Optiver US LLC ("Optiver"). In addition, the Commission received a thirteenth comment letter from Robert Rutkowski ("Rutkowski") after the comment period closed.

[2] FIA/FIA PTG NPRM Letter, at 2; *see also* CME NPRM Letter, at 1; ICE NPRM Letter, at 3. *See also* CME Group, Market Regulation Advisory Notice RA2006-5, "Disruptive Trading Practices" (effective Aug. 10, 2020), *available at* www.cmegroup.com/notices/market-regulation/2020/08/CME-Group-RA2006-5.html (prohibiting any market participant from intentionally or recklessly submitting or causing to be submitted an actionable or non-actionable message(s) that has the potential to disrupt exchange systems).

[3] FIA/FIA PTG NPRM Letter, at 1.

At the Commission's Technology Advisory Committee ("TAC") meeting on July 16, 2020, the TAC's Subcommittee on Automated and Modern Trading Markets ("Subcommittee") presented the Subcommittee's position regarding the proposed Risk Principles.[4] The Subcommittee stated that it broadly supports the rulemaking.[5] The Subcommittee also indicated support for how the Commission characterized the concepts of "electronic trading" and "market disruption."[6] However, the Subcommittee described the second part of the definition of "market disruption"—*i.e.*, disruption of the ability of other market participants to trade on the DCM on which the market participant is trading—as "amorphous."[7] The Subcommittee noted that it is difficult to define in advance whether or not a trade halt is disruptive.[8] The Subcommittee stated "a positive part of the principles-based approach" is that it allows the Commission and DCMs to define events in accordance with a principle as opposed to a list.[9]

The Subcommittee anticipated that many procedures and rules adopted by DCMs would be similar, but it is nevertheless important to allow for flexibility, given that DCM trading systems have different architectures and features.[10] The Subcommittee concluded that flexibility allows for market resilience and best practices that will improve over time.[11]

## C. Existing Part 38 Framework and the Risk Principles Proposal

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[4] Automated and Modern Trading Markets Subcommittee, "Discussion of the CFTC's Proposed Rule on Electronic Trading Risk Principles," (July 16, 2020) ("Subcommittee PowerPoint"), *available at* https://www.cftc.gov/About/CFTCCommittees/TechnologyAdvisory/tac_meetings.html.

[5] *See* July 16, 2020 TAC Meeting Transcript at 54:5.

[6] As discussed in further detail below, the NPRM described "electronic trading" as all trading and order messages submitted by electronic means to the DCM's electronic trading platform, including both automated and manual order entry. The NPRM described "market disruption" as generally including an event originating with a market participant that significantly disrupts the: (1) operation of the DCM on which such participant is trading; or (2) ability of other market participants to trade on the DCM on which such participant is trading. *See* NPRM at 42765. *See id.* at 54:11-55:14, 56:6-16; Subcommittee PowerPoint at 3.

[7] *See* July 16, 2020 TAC Meeting Transcript at 55:21-56:10.

[8] *See id.* at 58:6-17.

[9] *See id.*

[10] *See id.* at 6; July 16, 2020 TAC Meeting Transcript at 62:13-63:15.

[11] *See id.*

As discussed in the NPRM, the Risk Principles supplement existing DCM Core Principle 4 regulations in part 38, namely Commission regulations §§ 38.251 and 38.255.[12] Existing Commission regulation § 38.251(c) requires each DCM to demonstrate an effective program for conducting real-time monitoring of market conditions, price movements, and volumes, in order to detect abnormalities and, when necessary, to make a good-faith effort to resolve conditions that are, or threaten to be, disruptive to the market.[13] In addition, existing Commission regulation § 38.255 requires each DCM to establish and maintain risk control mechanisms to prevent and reduce the potential risk of price distortions and market disruptions, including, but not limited to, market restrictions that pause or halt trading in market conditions prescribed by the DCM.[14]

Building on the requirements under existing Commission regulation § 38.251 to conduct real-time monitoring and resolve conditions that are disruptive to the market, the Risk Principles, together with the Acceptable Practices, require DCMs to take reasonable steps to prevent, detect, and mitigate material market disruptions or system anomalies associated with electronic trading. Existing Commission regulations do not fully and explicitly address the risks of market disruptions or system anomalies associated with electronic trading, and the Risk Principles fill those gaps by establishing exchange rule and risk control requirements, as well as notification requirements, explicitly applicable to electronic trading. Additionally, while there may be some overlap between the Risk Principles and existing Commission regulation § 38.255, the Commission believes the Risk Principles are distinguishable from existing Commission regulation § 38.255 because they focus on DCM rules, risk controls, and notification requirements, and are not limited to the application of risk controls as exists in regulation §

[12] *See* NPRM, *supra* note 1 at 42762.
[13] 17 CFR 38.251(c).
[14] 17 CFR 38.255.

38.255. The Commission also submits that the Risk Principles will provide greater certainty to DCMs regarding their obligations to address certain situations associated with electronic trading.

## D. Framework of this Final Rulemaking

The proposed rulemaking was subject to a 60-day comment period, which closed on August 24, 2020. As noted above, the Commission received 13 substantive comments and held one *ex parte* meeting.[15] The following section addresses comments that generally apply to all three Risk Principles and Acceptable Practices. Comments that relate to individual Risk Principles and Acceptable Practices will be addressed in Section II.C-E.

### 1. Principles-Based Approach

In the NPRM, the Commission proposed a principles-based approach. The purpose of this approach was to provide DCMs with the flexibility to impose the most efficient and effective rules and pre-trade risk controls for market participants subject to the DCMs' respective jurisdictions. The Commission believes that a principles-based approach in connection with electronic trading requirements provides DCMs with flexibility to adapt and evolve with changing technologies and markets.[16]

#### a. Summary of Comments

Most commenters, including CME, CFE, CEWG, FIA/FIA PTG, ICE, ISDA/SIFMA, MFA, and Optiver supported a principles-based approach.[17] In particular, FIA/FIA PTG, ISDA/SIFMA, and MFA noted that such an approach provides flexibility and takes into account

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[15] *See supra* note 1.

[16] *See* NPRM at 42762.

[17] CME NPRM Letter, at 1, 12, 16; CFE NPRM Letter, at 1; CEWG NPRM Letter, at 2; FIA/FIA PTG NPRM Letter, at 2-4; ICE NPRM Letter, at 2, 9; ISDA/SIFMA NPRM Letter, at 1-2; MFA NPRM Letter, at 1-2; Optiver NPRM Letter, at 1.

future technological advances.[18] Commenters also stated that the principles-based approach is preferable to the prescriptive nature of prior proposals.[19] ICE supported the Commission's view that each DCM should have discretion to identify market disruptions and system anomalies as they relate to the DCM's market and participants' trading activity.[20] ICE stated that what constitutes a market disruption will not only vary from exchange to exchange, but also from market to market. Therefore, tolerance levels and thresholds must be set for each market.[21]

In contrast, AFR, Better Markets, IATP, and Rutkowski disagreed with the Commission's principles-based approach, and asserted that the incentives of DCMs and public regulators are not fully aligned.[22] Better Markets commented that the principles are too imprecise and unenforceable, and lack key definitions.[23] IATP emphasized that principles-based rules must be enforceable.[24] IATP also asserted principles-based rules that the Commission cannot effectively supervise and enforce would surrender, not delegate, the Commission's authority, and could legalize trading misconduct due to lack of resources.[25] AFR, Better Markets, and Rutkowski further commented that the proposed regulations provide too much deference to DCMs and that the Commission failed to address conflicts of interest concerns that may impede DCM and self-regulatory organization ("SRO") independence.[26]

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[18] FIA/FIA PTG NPRM Letter, at 2-4; ISDA/SIFMA NPRM Letter, at 1; MFA NPRM Letter, at 1-2.
[19] CME NPRM Letter, at 1, 12; CFE NPRM Letter, at 1; CEWG NPRM Letter, at 2.
[20] ICE NPRM Letter, at 2.
[21] *See id.*
[22] AFR NPRM Letter, at 1-2; Better Markets NPRM Letter, at 2, 6, 9, 10-12; IATP NPRM Letter, at 1, 4, 8; Rutkowski NPRM Letter, at 1.
[23] Better Markets NPRM Letter, at 2, 9.
[24] IATP NPRM Letter, at 1.
[25] *See id.* at 8.
[26] AFR NPRM Letter, at 1-2; Better Markets NPRM Letter, at 2, 6, 9, 10-12; Rutkowski NPRM Letter, at 1.

Finally, IATP made several comments addressing the potential for market disruption caused by "idiosyncratic" events, and suggested further study on the impact of electronic trading on intraday price volatility.[27]

**b. Discussion**

The Commission considered the comments and is adopting the principles-based approach to the Risk Principles as discussed in the NPRM. The Commission believes that a principles-based approach provides appropriate flexibility to allow DCMs to adopt and implement effective and efficient measures reasonably designed to achieve the objectives of the Risk Principles. The Commission submits that prescriptive rules may not be sufficiently flexible to enable DCMs to adopt appropriate measures for their particular market, and therefore, would not be as effective in preventing market disruptions or system anomalies.

The principles-based nature of the Risk Principles does not mean they are unenforceable. The Risk Principles will be enforceable regulations that allow the Commission to require all DCMs to implement appropriate, reasonable risk controls and rules to prevent, detect, and mitigate market disruptions. The Commission has brought enforcement actions relating to violations of Core Principles set forth in Commission regulations. Recently, in 2019, the Commission brought an action against Options Clearing Corporation ("OCC"), a derivatives clearing organization ("DCO"), for violations of DCO Core Principles under part 39.[28] In particular, the Commission determined "OCC failed to fully comply with the specified DCO Core Principles by failing to establish, implement, and enforce certain policies and procedures reasonably designed to (1) consider and produce margin levels commensurate with every

[27] *See supra* note 25 at 2-5, 8.
[28] *See* Order, CFTC Docket No. 19-19, at 3-5 (Sept. 4, 2019), *available at* https://www.cftc.gov/media/2396/enfoptionsclearingorder090419/download.

potential risk and particular attribute of each relevant product cleared by OCC; (2) effectively measure, monitor and manage its credit exposure and liquidity risk; and (3) protect the security of certain of its information systems."[29]

While the final rules do not formally define terms such as "market disruption" or "electronic trading" in rule text, the Commission provided a general discussion of those terms in the NPRM. The Commission is providing additional clarity concerning relevant terms in this preamble, in order for DCMs and other market participants to have a sufficient understanding of how the Commission will interpret and enforce the Risk Principles.[30] Further, by not defining the terms in a static way, the Commission intends to allow for DCMs' application of the Risk Principles to evolve over time alongside market developments.[31]

The Commission believes that DCMs are incentivized to have risk controls to promote the integrity of their markets, and existing risk controls in place across DCMs indicate that they have implemented such measures. As FIA/FIA PTG pointed out, "[a]ll market participants have a shared interest in strengthening risk controls. The interconnectedness of the listed derivatives markets means that all market participants are vulnerable when risk controls fail. It is no

[29] *Id.* at 2. The order stated the Commission found OCC had failed to comply with Core Principles in Section 5b(c)(2)(B), (D), and (I) of the Commodity Exchange Act ("CEA" or "Act"), and Commission regulations §§ 39.11(a) and (c), 39.13(a), (b), (f), and (g)(l) and (2), and 39.18(b)(l) and (e)(l). *See id.* at 3-5. The Commission issued a press release regarding the enforcement action stating: "'As this case shows, principles-based regulation does not mean lax oversight,' said CFTC Chairman Heath P. Tarbert. 'While clearing agencies have some discretion in crafting their risk management policies and procedures, those policies and procedures must be reasonable and take into consideration relevant risks.'" *See* Press Release, "SEC and CFTC Charge Options Clearing Corp. with Failing to Establish and Maintain Adequate Risk Management Policies" (Sept. 4, 2019), *available at* https://www.cftc.gov/PressRoom/PressReleases/8000-19.

Additionally, in 2015, the Commission brought an enforcement action against TeraExchange LLC, a provisionally registered swap execution facility ("SEF"), for violations of Core Principles requiring SEFs to enact and enforce rules prohibiting certain types of trade practices, including wash trading and prearranged trading. *See* Press Release, "CFTC Settles with TeraExchange LLC for Failing to Enforce Prohibitions on Wash Trading and Prearranged Trading in Bitcoin Swap" (Sept. 24, 2015), *available at* https://www.cftc.gov/PressRoom/PressReleases/7240-15.

[30] *See* Section II.A.

[31] *See* NPRM at 42765.

surprise, then, that the industry has worked diligently to enhance and extend risk controls over the years."[32]

The Risk Principles will require all DCMs to implement an appropriate standard for risk controls. DCMs are best positioned to determine what risk controls and rules are appropriate to prevent, detect, and mitigate disruptions on their respective markets. Permitting them to do so is consistent with Congressional intent to serve the public interests of the CEA "through a system of effective self-regulation of trading facilities . . . under the oversight of the Commission."[33] Any conflict of interest concerns, where DCMs might prioritize profitability over reasonable controls, will be addressed through regular Commission oversight of DCMs, including examinations.[34] For example, in an examination, Commission staff may consider whether a DCM is allocating sufficient financial and staff resources to the compliance function, the background and qualifications of the DCM's regulatory oversight committee members and compliance officers, and any role non-compliance personnel might be taking in the DCM's market monitoring and investigations processes.[35]

Regarding IATP's comments, the Commission acknowledges that market risks, like the markets themselves, are always evolving. The principles-based approach provides DCMs with

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[32] FIA/FIA PTG NPRM Letter, at 4. *See also* CME NPRM Letter, at 1 (". . . the integrity and reliability of our markets are cornerstones of our business model – market participants choose to manage their risk on the CME Group Exchanges because we offer fair, efficient, transparent, liquid, and dynamic markets that are conducted and operated in accordance with the highest standards."; ICE NPRM Letter, at 2 ("DCMs have proactively developed a substantial suite of risk controls, as well as financial, operational and supervisory controls to protect their markets and comply with existing regulations.").

[33] Section 3(b) of the CEA. 7 U.S.C. 5(b).

[34] The Commission notes that DCMs are already subject to Commission regulation § 38.850 (Core Principle 16, Conflicts of Interest), which requires DCMs to minimize conflicts of interest in the DCM's decision-making process and establish a process for resolving those conflicts of interest. 17 CFR 38.850.

[35] *See* Appendix B to Part 38—Guidance on, and Acceptable Practices in, Compliance with Core Principles, Core Principle 16 (Subparagraph (b)) ("To comply with this Core Principle, contract markets should be particularly vigilant for such conflicts between and among any of their self-regulatory responsibilities, their commercial interests, and the several interests of their management, members, owners, customers and market participants, other industry participants, and other constituencies.").

flexibility to address risks to markets as they evolve, including any idiosyncratic events. Prescriptive regulations may lack the flexibility to address such idiosyncratic events, while principles-based regulations would provide DCMs with a framework through which they can change their rules and risk controls to address such unforeseen events. The Commission or industry organizations may conduct studies relevant to electronic trading in the future, and the Commission expects that the results will inform regulatory oversight of DCMs and enforcement of the Risk Principles. The Commission notes that the Division of Market Oversight produced a report in 2019 examining trading functionality across markets and found a consistent increase in the percentage of trading that was identified as "automated" relative to "manual."[36] Further, the report also showed no general correlation (and in some instances an inverse correlation) between the increase in automated trading activity in these markets and daily volatility.[37]

### 2. Issues Related to a DCM-Focused Approach

The Commission proposed the Risk Principles should focus specifically on DCMs.[38] The NPRM stated the Commission will continue to monitor whether Risk Principles of this nature may be appropriate for other markets such as SEFs or foreign boards of trade ("FBOTs").[39] The Commission also encouraged the National Futures Association to evaluate whether it should provide additional supervisory guidance to its members.[40] As noted in the NPRM, each DCM may have a different risk management program based on its unique business model and market,

[36] Staff of the Market Intelligence Branch, "Impact of Automated Orders in Futures Markets" (Mar. 2019) at 4, 7, 13, *available at* https://www.cftc.gov/MarketReports/StaffReports/index.htm.
[37] *See id.*
[38] *See* NPRM at 42763.
[39] *See id.* at 42763 n.6.
[40] *See id.* at 42764.

and this may result in some degree of differences in DCM rules implementing the Risk Principles.[41]

**a. Summary of Comments**

CEWG, FIA/FIA PTG, and Optiver supported the Risk Principles' focus on DCMs and addressed issues relating to DCM discretion in implementing the Risk Principles.[42] FIA/FIA PTG stated that DCMs are the gatekeeper and overseer of electronic trading platforms and are therefore uniquely positioned to apply pre-trade controls uniformly to all participants and trading in their markets.[43] Optiver similarly noted that each DCM has a unique technology stack on which its platform is built and must be afforded latitude to develop rules and risk controls.[44] In contrast, AFR, Better Markets, IATP, and Rutkowski commented that the proposed regulations provide too much deference to DCMs, in allowing them to decide for themselves how to address prevention, detection, and mitigation of undefined market disruptions and system anomalies.[45]

CME stated the Risk Principles should apply to SEFs and FBOTs, in addition to DCMs.[46] CFE stated any Commission assessments of DCM controls should be across all DCMs, and the Commission should not seek to hold all DCMs to what the larger DCMs may have in place.[47] CME commented that each DCM may implement different rules and risk controls without harming market liquidity or integrity.[48] In contrast, Better Markets commented that the Risk Principles ensure a lack of uniformity in DCM policies, procedures, and controls and potentially

[41] *See id.* at 42765.
[42] CEWG NPRM Letter, at 3-4; FIA/FIA PTG NPRM Letter, at 3; Optiver NPRM Letter, at 1.
[43] FIA/FIA PTG NPRM Letter, at 3.
[44] Optiver NPRM Letter, at 1.
[45] AFR NPRM Letter, at 1-2; Better Markets NPRM Letter, at 2, 6, 9, 10-12; IATP NPRM Letter, at 6-11; Rutkowski NPRM Letter, at 1.
[46] CME NPRM Letter, at 2, 13.
[47] CFE NPRM Letter, at 4.
[48] CME NPRM Letter, at 13.

would punish responsible DCMs.[49] Similarly, IATP asserted competition among DCMs for over-the-counter trading and for trading in new products, such as digital coins, could result in lax risk control design or updating under competitive pressures.[50] IATP asked the Commission to explain why the lack of any uniform standard by which DCMs should develop rules and risk controls presents no risk of regulatory arbitrage or migration of market disruptions from one DCM to another.[51]

While the Risk Principles apply to DCMs, CEWG commented on their potential effect on market participants. In particular, CEWG requested the final rules clarify that market participants without access to source code used to operate trading systems would not be subject to DCM-imposed requirements to implement updates, test or monitor the operation of such software, or DCM-imposed requirements under Risk Principle 3 to implement remediation measures for software.[52]

Finally, IATP commented that the Risk Principles indiscriminately apply to asset classes, financial speculators, and commercial hedgers.[53] IATP further stated that the Commission should issue a term sheet for a study to investigate the feasibility of revising the demutualization rule to create tiers of DCMs with respect to physical and financial derivatives contracts, to which a rule on automated trading would apply.[54] IATP also commented that the Commission should distinguish what additional pre-trade and post-trade risk controls the DCMs must maintain from what is required of futures commission merchants ("FCMs") prescriptively.[55]

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[49] Better Markets NPRM Letter, at 9.
[50] IATP NPRM Letter, at 9.
[51] IATP NPRM Letter, at 11.
[52] CEWG NPRM Letter, at 7.
[53] IATP NPRM Letter, at 4-5.
[54] *See id*.
[55] IATP NPRM Letter, at 13.

**b. Discussion**

The Commission believes that a regulatory approach focusing on Risk Principles applicable only to DCMs is the correct approach. All participants and intermediaries have a responsibility to address the risks of electronic trading. However, trading occurs on DCM platforms and DCM-implemented rules and risk controls will be most effective in preventing, detecting, and mitigating system anomalies and market disruptions. As noted above, conflict of interest concerns will be addressed through regular Commission oversight. DCMs are subject to Commission regulation § 38.850 (Core Principle 16, Conflicts of Interest), which requires DCMs to minimize conflicts of interest in the DCM's decision-making process and establish a process for resolving those conflicts of interest.[56] The Commission believes that DCMs, and other market participants, do have an interest in maintaining market integrity, and this is evidenced through existing measures. In its comment, FIA/FIA PTG addressed DCM tools and procedures adopted to address electronic trading risk, including basic "fat finger" controls, dynamic price collars, kill switches, cancel-on-disconnect, drop copy feeds, and self-match prevention, as well as granular pre-trade controls to manage limits within a product group.[57] FIA/FIA PTG noted that development of risk control measures "has been an evolving, iterative process, with market participants, FCMs, technology vendors and DCMs working together to build the safeguards

[56] 17 CFR 38.850. *See also* David Reiffen and Michel A. Robe, Demutualization and Customer Protection at Self-Regulatory Financial Exchanges, Journal of Futures Markets, Vol. 31, 126-164, Feb. 2011 (in many circumstances, an exchange that maximizes shareholder (rather than member) income has a greater incentive to enforce aggressively regulations that protect participants from dishonest agents); and Kobana Abukari and Isaac Otchere, Has Stock Exchange Demutualization Improved Market Quality? International Evidence, Review of Quantitative Finance and Accounting, Dec 09, 2019, https://doi.org/10.1007/s11156-019-00863-y (demutualized exchanges have realized significant reductions in transaction costs in the post-demutualization period).

[57] FIA/FIA PTG NPRM Letter, at 2.

needed to protect our markets. After all, it is in everyone's interest to have efficient, reliable markets."[58]

The Commission acknowledges IATP's points concerning the possibility of creating different tiers of DCMs, and distinguishing controls required of DCMs from those required of FCMs. However, the Commission believes it is preferable to have the same regulations apply to all DCMs, and, in the enforcement of such regulations, recognize that each DCM has a unique market, technological infrastructure, and market participants. In addition, DCMs may require different controls from FCMs and the Commission will not specify particular required controls. This will serve the goal of ensuring that all DCMs, whatever their size or products, are subject to the same Commission regulations while allowing sufficient flexibility for each DCM to adopt risk controls and rules that are reasonably appropriate for its market.

As noted in the NPRM, the Commission will continue to monitor whether Risk Principles of this nature may be appropriate for other markets such as SEFs or FBOTs.[59] The Commission initially proposed the Risk Principles with a focus on DCMs due to their prominent nature in the futures market. Application of the Risk Principles to SEFs and FBOTs requires further study and consideration regarding the risks and unique attributes of those other markets, and the Commission expects to do so in the future to determine whether SEFs and/or FBOTs should be subject to the Risk Principles or similar regulations.

The Commission acknowledges that DCMs might implement different rules and risk controls given differences in their respective markets. Ongoing Commission oversight is expected to identify differences in DCM policies, procedures, and controls. Differences between and among DCMs would be acceptable under the Risk Principles so long as their policies,

[58] *See id.*
[59] *See* NPRM at 42763 n.6.

procedures, and controls are objectively reasonable. The Risk Principles will require DCMs to establish rules and risk controls reasonably designed to prevent, detect, and mitigate market disruptions, and this should, in turn, help prevent the migration of market disruptions from one DCM to another.

The Commission acknowledges CEWG's request that the final rules clarify that market participants without access to source code used to operate trading systems would not be subject to any DCM rules to implement updates, test or monitor the operation of such software, or DCM rules under Risk Principle 3 to implement remediation measures for software.[60] While these points are reasonable, the Commission believes the extent to which market participants would be expected to implement software updates, tests, operation monitoring, or remediation measures should be left to individual DCM reasonable discretion. The Commission can envision unique arrangements involving market participant use of third-party software and therefore believes DCMs are the appropriate entity to adopt reasonable rules to govern those arrangements. The Commission notes that under existing Commission regulation § 38.151, DCMs must provide their members, persons with trading privileges, and independent software vendors with impartial access to their markets and services, including access criteria that are impartial, transparent, and applied in a non-discriminatory manner.[61]

### 3. Issues Related to Codification in Core Principle 4 and Overlap with Existing Commission Regulations

The NPRM noted several areas where the Risk Principles may overlap with existing Commission regulations, including regulations related to the prevention of market disruptions

[60] CEWG NPRM Letter, at 7.
[61] 17 CFR 38.151.

and financial risk controls.[62] The Commission explained that because DCMs have developed robust and effective processes for identifying and managing risks, both because of their incentives to maintain markets with integrity, as well as for purposes of compliance with existing Commission regulations, the Risk Principles may not necessitate the adoption of additional measures by DCMs.[63] The Commission further stated that the proposed Risk Principles will result in DCMs continuing to monitor risks as they evolve along with the markets and make reasonable modifications as appropriate.[64] Finally, the Commission proposed codifying the Risk Principles as part of Core Principle 4.[65]

**a. Summary of Comments**

CME, ICE, and Better Markets asserted that the Risk Principles are redundant of existing regulations.[66] In particular, CME commented that the Risk Principles overlap with existing regulations that require DCMs to have controls, tools, and rule sets to prevent and mitigate market and system disruptions.[67] CME stated that its messaging controls, for example, are already arguably subject to Commission oversight pursuant to certain existing regulations under Core Principles 2 and 4.[68] CME suggested the Commission take an alternative approach of simply relying on existing regulations rather than adopting new ones.[69] CME also addressed where in the part 38 regulations the Risk Principles should be codified if adopted. CME suggested the Risk Principles be codified as part of Core Principle 2, particularly Risk Principle

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[62] *See* NPRM 42762, 42764.
[63] *See* NPRM 42762.
[64] *See id*.
[65] *See id.*
[66] CME NPRM Letter, at 12-13; ICE NPRM Letter, at 3; Better Markets NPRM Letter, at 4-9.
[67] CME NPRM Letter, at 12-13.
[68] *See id.* at 7.
[69] *See id.* at 12.

1, because that Core Principle requires a DCM to adopt and implement rules.[70] CME also pointed out that Core Principle 4 addresses manipulation, price distortion, and disruptions of the delivery or cash-settlement process and that a “market disruption” or “system anomaly” does not fit within those elements.[71]

ICE commented that the proposed risk principles largely duplicate existing Core Principle 4 guidance and acceptable practices.[72] ICE suggested amending existing regulations, such as Commission regulation § 38.255, to refer to electronic trading, rather than create a new set of principles that may unintentionally conflict with or create duplicative and overlapping standards.[73] ICE stated this would track the Commission’s approach to regulating financial risk controls in existing Commission regulation § 38.607, which it believes has proven effective.[74]

Better Markets similarly commented that the proposed regulations are redundant of existing Commission regulations. Specifically, Better Markets pointed to Commission regulations §§ 38.157, 38.251(a), 38.255, 38.607, 38.1050, and 38.1051, as well as Core Principle 4 guidance and acceptable practices.[75] Better Markets stated the Risk Principles give the public the false impression that the CFTC is taking meaningful regulatory action.[76] Better Markets also considered the Commission’s distinction that the new principles are “anticipatory” to be unclear and possibly inaccurate.[77] Better Markets further commented that existing Commission regulation § 38.255 squarely focuses on risk controls for the prevention and

[70] *See id.* at 12-13.
[71] *See id.*
[72] ICE NPRM Letter, at 3.
[73] *See id*.
[74] *See id*.
[75] Better Markets NPRM Letter, at 4-9.
[76] *See id*.
[77] *See id*.

mitigation of market disruptions.[78] Better Markets stated that existing Commission regulation § 38.255 and the proposed Risk Principles are so similar that it is unreasonable, if not deceptive, to finalize them under the pretext that the Commission is setting forth a new and improved electronic trading framework.[79]

CME, CEWG, FIA/FIA PTG, ICE, and MFA commented that DCMs already implement controls and address risks to their platforms.[80] MFA believes the Risk Principles will help encourage DCMs to continue to monitor risks as they evolve along with the markets, and to make reasonable modifications as appropriate.[81] AFR and Rutkowski disagreed, commenting that the NPRM does not contain any systematic analysis demonstrating that current DCM practices are effective in controlling the risks of market disruptions due to electronic trading.[82]

**b. Discussion**

As noted in the NPRM, the Risk Principles supplement existing Commission regulations governing DCMs by directly addressing certain risks associated with electronic trading in Core Principle 4 and its implementing regulations, namely Commission regulations §§ 38.251 and 38.255.[83] Commission regulation § 38.251(c) requires DCMs to conduct real-time monitoring and resolve conditions that are disruptive to the market. The Risk Principles supplement this regulation by specifically requiring actions by DCMs to prevent, detect, and mitigate market disruptions and systems anomalies. While the anticipatory nature of the Risk Principles (involving prevention, in addition to detection and mitigation) is not the only justification for

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[78] *See id*.
[79] *See id*.
[80] CME NPRM Letter, at 4-7; CEWG NPRM Letter, at 4; FIA/FIA PTG NPRM Letter, at 3; ICE NPRM Letter, at 1; MFA NPRM Letter, at 2.
[81] MFA NPRM Letter, at 2.
[82] AFR NPRM Letter, at 2; Rutkowski NPRM Letter, at 2.
[83] *See* NPRM at 42768.

these new rules, the Commission believes it is important to clarify that DCMs are obligated to do more than monitor and resolve disruptive conditions, as required by existing Commission regulation § 38.251. In particular, Risk Principle 1 specifically requires the adoption of exchange-based "rules" that are reasonably designed to address electronic trading risk to the extent that such rules are not already in place.

The NPRM further acknowledged that the Risk Principles largely overlap with Commission regulation § 38.255, which requires DCMs to "establish and maintain risk control mechanisms to prevent and reduce the potential risk of price distortions and market disruptions, including, but not limited to, market restrictions that pause or halt trading in market conditions prescribed" by the DCM.[84] Compared to existing Commission regulation § 38.255, the Risk Principles specifically address material market disruptions and system anomalies associated with electronic trading (*e.g.*, excessive messaging that may materially limit participant access), not only market disruptions involving market halts or price distortions.

The Commission disagrees with comments asserting the Risk Principles would be more appropriately implemented under Core Principle 2 rather than Core Principle 4. Various regulations promulgated under Core Principle 4 already address market disruptions, including Commission regulations §§ 38.251(c) and 38.255. The Commission believes that the Risk Principles, each dealing with market disruptions, should likewise be codified under Core Principle 4.

The Commission believes that it must do more than rely on existing regulations or add the words "electronic trading" to existing regulations. For this reason, the Commission notes that the final Risk Principles specifically will apply to electronic trading, thereby requiring adoption

[84] NPRM at 42768.

of a DCM rule (if not already implemented) and risk control and notification requirements regarding market disruptions, that is expected to ensure the development and implementation of reasonable measures to address the threat of market disruptions caused by electronic trading. The Commission expects that these Risk Principles will enhance the Commission's ability to hold DCMs to a standard of reasonably-designed rules and appropriate risk controls, whether those rules and controls were already in place or are implemented pursuant to the Risk Principles.[85]

The NPRM noted several examples of exchange-based risk controls and several commenters elaborated further on these risk controls.[86] The Commission continues to believe most DCMs already have effective controls in place to address electronic trading market disruptions. These Risk Principles will require DCMs to continue to implement such reasonable controls as markets and risks evolve.

## II. The Final Risk Principles

### A. Key Terms

The NPRM stated that the Risk Principles focus on market disruptions or system anomalies associated with electronic trading activities.[87] While not defined in the regulation text, the preamble broadly discussed the goals of the Risk Principles through these terms. The NPRM further stated by not defining the terms in a static way, the Commission intends that the

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[85] The Commission notes that it does not intend or expect larger DCM pre-trade risk controls to be the standard for all DCMs, although there may be risk controls that are common to all DCMs.

[86] NPRM at 42768. CME commented it has a vested interest in preserving the integrity of its markets, and has done so through market integrity controls such as order messaging throttles, price limits, automated port closures, kill switches, velocity logic controls and dynamic circuit breakers, as well as trade practice, disciplinary and administrative rules. CME NPRM Letter, at 4. ICE pointed out that prior to giving a participant access to its trading platform, ICE requires the participant to undergo conformance testing, which is designed to and has been successful in detecting system anomalies. ICE NPRM Letter, at 2. ICE additionally stated it has developed pre-trade risk controls, such as messaging throttles, interval price limits (price velocity collars), individual maximum order quantities, and order reasonability limits. *See id.* CFE commented it has extensive rule provisions that provide for risk controls applicable to all orders. CFE NPRM Letter, at 2.

[87] NPRM at 42765.

application of the Risk Principles by DCMs and the Commission will evolve over time along with market developments.[88] The NPRM stated that a general discussion of those terms in the context of today's electronic markets would provide the public and, in particular, DCMs, guidance for applying the Risk Principles.[89]

### 1. Electronic Trading

#### a. Proposal

For purposes of this rulemaking, the Commission described electronic trading as encompassing a wide scope of trading activities, including all trading and order messages submitted by electronic means to a DCM's electronic trading platform.[90] This includes both automated and manual order entry.[91]

#### b. Summary of Comments

CME and ICE addressed whether the Commission should modify its description of the term electronic trading. CME believed that the term was sufficiently clear.[92] In contrast, ICE commented that the term is used in Risk Principles 1 and 2 to "include all trading and order messages submitted by electronic means to the DCM's electronic trading platform, including both automated and manual order entry."[93] ICE stated that the inclusion of "trading" messages is unnecessary.[94] Because participants only submit "order" messages to the central limit order book and not trades, ICE believes that the term "electronic trading" captures off-facility transactions,

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[88] *See id.*
[89] *See id.*
[90] *See id.*
[91] *See id.*
[92] CME NPRM Letter, at 10.
[93] ICE NPRM Letter, at 2, 3-4, 5.
[94] *See id.*

such as exchange for related positions ("EFRPs") and block transactions.[95] ICE stated off-facility transactions are privately negotiated and have a low likelihood of disrupting the central limit order book.[96]

### c. Discussion

The Commission clarifies that the term "electronic trading" includes block and EFRP transactions, if such transactions are submitted electronically to the DCM's trading platform. The Commission believes that DCMs should have reasonable discretion to decide what rules and controls—if any—should be applied to off-exchange transactions such as block trades and EFRPs under Risk Principles 1 and 2. The Commission expects DCMs to make such a determination based on: (a) the risk such off-exchange transactions will disrupt DCM platforms or markets; and (b) the rules and controls that would be most effective to address that risk. The Commission acknowledges that such trades are privately negotiated and currently may carry little risk of market disruption. However, it is unknown how much risk off-exchange trading will pose as markets evolve over time. In particular, off-exchange transactions could become increasingly electronic or automated, impact price formation and, consequently, pose greater risk to DCM markets. The Risk Principles allow DCM discretion in assessing this risk and how best to address it.

## 2. Market Disruption and System Anomaly

### a. Proposal

In the NPRM, the Commission stated it considers the term "market disruption," for purposes of the Risk Principles, to generally mean an event originating with a market participant that significantly disrupts the: (1) operation of the DCM on which such participant is trading; or

[95] *See id.*
[96] *See id.*

(2) the ability of other market participants to trade on the DCM on which such participant is trading.[97] For the purposes of the Risk Principles, "system anomalies" are unexpected conditions that occur in a market participant's functional system that cause a similar disruption to the operation of the DCM or the ability of market participants to trade on the DCM.[98]

**b. Summary of Comments**

ICE, CME, CEWG, MFA, IATP, Better Markets, and MGEX addressed whether the Commission should modify its description of the terms market disruption and system anomaly.[99]

ICE requested clarification on whether the term "significant" qualifies "market disruption."[100] ICE also commented that the description of "market disruption" is overly broad, noting that the Commission uses the term to refer to an incident that disrupts the ability of other market participants to trade on the DCM.[101] ICE asserted this could include a range of subjective interpretations and possibilities, including a disruption resulting in prices not reflective of market fundamentals.[102] ICE commented that the term could also be interpreted to include entering orders in a disorderly manner, quote stuffing, causing illiquid markets where one would not occur otherwise, or causing the artificial widening of markets.[103] ICE stated these scenarios could result from volatility but not a market disruption, and, because of the ambiguities in the Risk Principles, market participants may be reluctant to trade if pricing appears aberrant or erroneous.[104] CEWG commented that the Commission should provide further high-level

[97] NPRM at 42765.
[98] *See id.*
[99] ICE NPRM Letter, at 5-6; CME NPRM Letter, at 3-4, 10-11; CEWG NPRM Letter, at 4, 5; MFA NPRM Letter, at 3; IATP NPRM Letter, at 6; Better Markets NPRM Letter, at 9, 10; MGEX NPRM Letter, at 1-2, 3.
[100] ICE NPRM Letter, at 5.
[101] *See id.*
[102] *See id.*
[103] *See id.*
[104] *See id.*

guidance with respect to events constituting "market disruptions" or "system anomalies" to minimize the potential for regulatory uncertainty.[105]

CME commented that the term "market disruption" is sufficiently clear.[106] Similarly, MFA agreed with the Commission's approach to defining "market disruption," which MFA believes focuses correctly on events impacting the operations of the DCM and/or the ability of other market participants to trade on the DCM, rather than the impact on trading of a single firm whose electronic trading was the source of the disruption.[107] MFA also commented it supports that the Risk Principles allow a DCM to exercise discretion in identifying market disruptions and system anomalies as they relate to the DCM's particular market and the trading activities of participants in that market.[108]

CME cautioned that no specific type of market halt should be considered a *per se* "market disruption" because some halts prevent and mitigate market disruptions.[109] Similarly, ICE commented that an unscheduled trading halt caused by a market participant, which could not readily be attributed to market volatility or fundamental conditions in underlying or related markets, could constitute a market disruption.[110] CME stated that the Commission should not characterize any specific period of latency as *per se* disruptive, because latency can occur due to bona fide market activity, or be based on a participant's own system.[111] CME stated that a fact-specific inquiry is necessary to determine if there has been a market disruption.[112] Similarly, ICE

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[105] CEWG NPRM Letter, at 4.
[106] CME NPRM Letter, at 10-11.
[107] MFA NPRM Letter, at 3.
[108] *See id.*
[109] CME NPRM Letter, at 10-11.
[110] ICE NPRM Letter, at 5-6.
[111] CME NPRM Letter, at 10-11.
[112] *See id.*

stated that latency incorporates many factors outside a DCM's processing of order messages.[113] As such, the Commission should be cautious when interpreting latency as an indication of a market disruption.[114] ICE stated it is more meaningful to quantify the impact on the market rather than to calculate a subjective impact to latency.[115] CEWG commented that a disruptive event could have a significant impact on the market in one context, but not in another.[116] For example, a one or two second delay in processing and execution may constitute a market disruption to automated trading firms but not to manual traders.[117]

CME commented regarding the preamble's assertion that "system anomalies" are unexpected conditions that occur in a participant's functional system "which cause a similar disruption to the operation of the DCM or the ability of market participants to trade on the DCM."[118] CME stated one could interpret the preamble language to mean the disruptions to the DCM must be similar to the disruptions to the originating participant.[119] CME suggested if the phrase "which cause a similar disruption" is actually referring to the Commission's definition of "market disruption" described earlier in the NPRM preamble, then the Commission should clarify accordingly.[120]

CME further commented that both definitions relate to the ability of other participants "to trade."[121] CME stated that sections of the preamble reference participants' inability to trade,

[113] ICE NPRM Letter, at 6.
[114] *See id.*
[115] *See id.*
[116] CEWG NPRM Letter, at 5.
[117] *See id.*
[118] CME NPRM Letter, at 3.
[119] *See id.*
[120] *See id.*
[121] *See id.*

engage in price discovery, or manage risk.[122] CME asked the Commission to clarify whether it always means all three situations, or any of those situations.[123] CME further commented that the Commission reconsider using the word "ability."[124] CME pointed out that not all the examples of market disruptions cited in the NPRM involved a disruption to the operation of the DCM and a participant being unable to trade, engage in price discovery, or manage risk.[125] CME suggested that a clearer and more objective standard would be that the event "must significantly disrupt other participants' *access* to the DCM."[126] CME believes this standard captures the risks identified in the rulemaking and is something DCMs can typically identify on their own.[127]

IATP commented that the Commission grants too much discretion to DCMs to interpret the terms of the NPRM and to determine what is or is not a "market disruption" or "system anomaly" and whether to mitigate it.[128] Better Markets commented that terms such as "significant" and "disruption" are ambiguous and will lead to divergent practices.[129] Better Markets also commented that the Risk Principles provide essentially unfettered discretion to each DCM in terms of how to define market disruptions and system anomalies as they relate to their particular markets, and permitting differing definitions will undermine comparative analyses of market disruptions across exchanges.[130]

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[122] *See id.*

[123] *See id.*

[124] CME NPRM Letter, at 3-4.

[125] *See id.* In particular, CME referenced 2011 disciplinary actions involving the same trading firm, where an automated trading system malfunction prompted selling e-mini Nasdaq 100 Index futures on the Chicago Mercantile Exchange, and another malfunction caused a rapid buying in oil futures on the New York Mercantile Exchange ("NYMEX").

[126] *See id.* (emphasis added).

[127] *See id.*

[128] IATP NPRM Letter, at 6.

[129] Better Markets NPRM Letter, at 9.

[130] *See id.* at 10. Better Markets cited "the Flash Crash, recent WTI trading anomalies in the oil markets, and the Knight Capital meltdown" as examples demonstrating that electronic trading presents "varied, complex, and

MGEX commented that the Commission should continue with its principles-based approach to broadly define "market disruption" and "system anomalies" associated with electronic trading and ensure the reasonableness standard is approached with ample discretion.[131] MGEX considered the general definitions of "market disruption" and "system anomalies" stated in the NPRM to be acceptable, with the caveat that each DCM operates differently, and the Commission should recognize this during its rule enforcement reviews.[132]

**c. Discussion**

The NPRM described a market disruption as an event originating with a market participant that significantly disrupts the operation of the DCM on which such participant is trading. The proposed regulation text for Risk Principle 3 expressly included the term "significant," while the regulation text for Risk Principles 1 and 2 did not. The Commission clarifies that the term "market disruption," for DCMs' definitional and rule implementation purposes to satisfy Risk Principles 1 and 2, refers specifically to disruptions that *materially* impact the proper functioning of a DCM's trading platform. The term "market disruption" does not encompass disruptions that have only a *de minimis* effect on a DCM's trading platforms or the ability of other market participants to trade, engage in price discovery, or manage risk. For example, a technical malfunction at a market participant might cause excessive messaging in a product before a DCM's risk controls limit trading in that product. If the trading halt has a material impact on other market participants' ability to trade in that product, then that would constitute a market disruption. However, if trading is only halted for a *de minimis* amount of time, and market participants can quickly resume trading in that product, that may not rise to the

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potentially extensive risks to market integrity, orderly trading, fair competition, and the price discovery process across the financial markets." *See id.* at 3.

[131] MGEX NPRM Letter, at 1-2.

[132] *See id.* at 3.

level of a material "market disruption" of the DCM's trading platform for purposes of the Risk Principles.

CME indicated that a specific disruption cited in the NPRM (namely a malfunction that prompted the selling of e-mini Nasdaq 100 Index futures on the Chicago Mercantile Exchange, and another malfunction that caused a rapid buying of oil futures on NYMEX) was not necessarily a "market disruption," because the event did not disrupt the operation of the DCM or limit market participants' ability to trade.[133] The Commission acknowledges that DCMs will have some discretion to determine whether an event constitutes a market disruption for purposes of the Risk Principles. However, if the malfunctions described in the 2011 CME disciplinary actions were to cause a material change in price that deviated from prevailing market prices, and the DCMs were required to cancel numerous trades, the Commission would likely view such a scenario as a material market disruption that DCMs should have reasonable rules and risk controls in place to prevent, detect, and mitigate. The materiality of a market disruption would depend on, for example, in the context of trade errors, how quickly the DCM can correct erroneous prices, and how many contracts are affected. In the event of a market disruption involving a trading halt, materiality generally would depend on how quickly trading is able to resume.

Under Risk Principle 3, DCMs only have to report market disruptions under Risk Principles 1 and 2 that are "significant." All significant market disruptions under Risk Principle 3 are also market disruptions under Risk Principles 1 and 2, but the converse is not true: some market disruptions under Risk Principles 1 and 2 will not be sufficiently significant to trigger the reporting requirement under Risk Principle 3. Thus, the standard for a significant market

[133] CME NPRM Letter, at 3.

disruption under Risk Principle 3 is higher than the standard for a market disruption under Risk Principles 1 and 2. The Commission emphasizes that DCMs have reasonable discretion to determine whether a given market disruption had a "significant" impact on the trading platform, so as to trigger Risk Principle 3 reporting.[134]

Further, as to each Risk Principle, the Commission clarifies that the terms "market disruption" and "system anomaly" are intended to capture scenarios where a participant's ability to trade, engage in price discovery, *or* manage risk are materially impacted. All three scenarios do not have to occur for an event to be considered a market disruption or system anomaly. In addition, the Commission clarifies that "system anomalies" are unexpected conditions that occur in a market participant's functional system that cause a disruption to the operation of the DCM or the ability of market participants to trade on the DCM, engage in price discovery, or manage risk. The disruption on the DCM need not be similar in nature to the disruption in a participant's system.

The Commission understands that many examples of a market participant's ability to trade on the DCM, engage in price discovery, or manage risk may involve the limitation of participant access to the DCM. However, the Commission declines to limit the definitions of "market disruption" or "system anomaly" to a limitation of access, as there may be situations where market participants cannot engage in price discovery, regardless of whether they have access to the DCM. For example, a market participant may have access to trade in a particular product, but the product's price has been impacted by inadvertent rapid selling or buying.

[134] "Reasonable discretion" shall be interpreted in the same manner as it has been used elsewhere in the Commission's regulations. *See, e.g.,* Part 38 Core Principle 1, which provides, "Unless otherwise determined by the Commission by rule or regulation, a board of trade described in paragraph (a) of this section shall have *reasonable discretion* in establishing the manner in which the board of trade complies with the core principles described in this subsection." 17 CFR 38.100 (emphasis added).

The Commission believes the term "market disruption" is not overly broad. While one commenter asserted that "market disruption" could include various events that involve prices not reflecting market fundamentals, such as entering orders in a disorderly manner, quote stuffing, causing illiquid markets where one would not occur otherwise, or causing the artificial widening of markets, the Commission clarifies that *intentionally or recklessly* disruptive trading behavior is not meant to be within the scope of the Risk Principles.[135] Rather, the focus of the Risk Principles is to address *unintentional* technological malfunctions that disrupt the operation of the DCM or the ability of market participants to trade, engage in price discovery, or manage risk. A situation where prices do not reflect market fundamentals is not sufficient, on its own, to constitute a material market disruption for purposes of the Risk Principles.

The Commission agrees that no specific market halt should be considered a *per se* "market disruption," because certain halts effectively prevent and mitigate market disruptions. Further, the Commission will not characterize any specific period of latency as *per se* disruptive due to the various causes of latency, not all of them relating to market disruptive events. The Commission emphasizes that DCMs have discretion in determining whether a trading halt is disruptive.

In response to comments relating to DCM discretion, the Commission reiterates DCMs are best-positioned to assess the material market disruption and system anomaly risks posed by their markets and market participant activity, and to design appropriate measures to address those risks. However, while DCMs may differ in what they consider to be a "market disruption" or "system anomaly," and whether and how to mitigate such an event, this is not unlimited

[135] Intentional or reckless acts of price manipulation, fraud, disruptive trading, wash sales, or pre-arranged trading, among others, are addressed through existing provisions, including, but not limited to, Sections 4b, 4c(a)(2), 4c(a)(5), 4o, and 9 of the CEA and Commission regulations §§ 1.38, 180.1, 180.2, 38.152, and 38.250. *See* 7 U.S.C. 6b, 6c(a)(2), 6c(a)(5), 6o, 9; 17 CFR 1.38, 180.1, 180.2, 38.152, 38.250.

discretion. The Commission will oversee and enforce the Risk Principles in accordance with an objective reasonableness standard. In other words, while a DCM has discretion to determine what rules and risk controls are appropriate, the Commission as part of its oversight responsibility will consider the objective reasonableness of those measures in light of the DCM's products, volume, market participants and other factors, and how similarly positioned DCMs address similar risks.

Due to differences among DCMs, the Commission acknowledges DCMs may have different determinations of what constitutes a "market disruption" or "system anomaly." In response to the comment from Better Markets, the Commission does not believe this will hinder any "comparative" analysis of market disruptions across exchanges. When assessing material market disruptions, the Commission will consider differences among DCM markets, technology, products, and market participants as part of its oversight.

As to MGEX's comment that each DCM operates differently, the Commission acknowledges that each DCM operates unique markets, with unique market participants, products, and technology. The Commission already takes this into account with respect to its routine oversight, including examinations.

## B. The Reasonableness Standard

### 1. Proposal

The Commission proposed Acceptable Practices to Risk Principles 1 and 2, which provide that a DCM can comply with those principles by adopting rules, and subjecting all electronic orders to exchange-based pre-trade risk controls, that are "reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading."[136]

## 2. Summary of Comments

ICE, MGEX, CME, Better Markets, and IATP commented on the reasonableness standard.[137] ICE supported the Commission's approach to give DCMs reasonable discretion to adopt rules that prevent, detect, and mitigate market disruptions.[138] ICE stated DCMs are best-positioned to adopt the rules, procedures, and system controls that fit their market and technology.[139] ICE further commented that the proposed Acceptable Practice for Commission regulation § 38.251(e) provides DCMs with sufficient discretion to adopt the rules appropriate for their platform.[140] ICE believes the supervisory obligations set out in exchange rules, along with requirements relating to disruptive trading practices, have been effective in preventing market disruptions.[141] Similarly, MGEX commented that the Commission should accept that DCMs may differ in the rules they establish based on the unique and different markets and products, and DCMs must have discretion to ensure that the rules are "objectively reasonable" to address a market disruption or system anomaly.[142]

CME commented that the Commission should add "reasonably designed" to the regulation text, not just acceptable practices, just as it is in at least 40 other existing Commission regulations.[143] CME believes this is especially important for Risk Principle 2, which requires

[136] NPRM at 42777.
[137] ICE NPRM Letter, at 2; MGEX NPRM Letter, at 2-3; CME NPRM Letter, at 4-5, 6, 13; Better Markets NPRM Letter, at 8; IATP NPRM Letter, at 9.
[138] ICE NPRM Letter, at 2.
[139] *See id.*
[140] *See id.*
[141] *See id.*
[142] MGEX NPRM Letter, at 2-3.
[143] CME NPRM Letter, at 4-5.

controls to "prevent" system anomalies.[144] CME stated that the word "prevent" creates an impossible standard without a condition in the Risk Principle explicitly stating that the controls must be "reasonably designed."[145]

Better Markets commented that the Commission's emphasis on DCM flexibility suggests confusion as to whether reasonableness is an objective or subjective standard.[146] Better Markets believed the preamble to the final rules should state that the Risk Principles may require DCMs to do things differently if their pre-trade risk controls do not objectively satisfy the regulations.[147] Better Markets also commented that the NPRM's preamble set forth a "near presumption of reasonableness."[148] Similarly, IATP commented that the preamble indicates it is unlikely the Commission will take any enforcement action against DCMs.[149] IATP disagreed with the Commission's statement that the Risk Principles will not result in enforcement actions based on strict liability.[150] IATP stated that assuring DCMs that risk control failure will not result in enforcement action would signal to plaintiffs in a market disruption case that they would have to meet a high evidentiary standard.[151]

**3. Discussion**

The Acceptable Practices will be adopted as proposed with the "reasonably designed" standard. As stated in the NPRM, the Acceptable Practices for implementing the Risk Principles provide that DCMs shall have satisfied their requirements under the Risk Principles if they have established and implemented rules and pre-trade risk controls that are reasonably designed to

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[144] *See id.* at 6.
[145] *See id.* at 6-7.
[146] Better Markets NPRM Letter, at 8.
[147] *See id.*
[148] *See id.*
[149] IATP NPRM Letter, at 9.
[150] *See id.*
[151] *See id.*

prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading.[152] "Reasonably designed" means that a DCM's rules and risk controls are objectively reasonable. As noted above, in assessing a DCM's rules and risk controls, the Commission as part of its oversight responsibility will consider the objective reasonableness of those measures in light of the DCM's products, volume, market participants and other factors, and how similarly positioned DCMs address similar risks.

The Acceptable Practices are intended to provide DCMs with reasonable discretion to impose rules and risk controls to prevent, detect, and mitigate market disruption. Transferring the reasonableness standard to the regulation text is not necessary to allow DCM discretion to impose rules and controls appropriate to their own markets.

In addition, the word "prevent," when part of a reasonableness standard applicable through Acceptable Practices, does not create an impossible standard to achieve. Rules and controls implemented by DCMs need to be reasonable, as determined by an objective standard. Risk Principles 1 and 2 do not require DCMs to "prevent" market disruptions and system anomalies in all circumstances. A goal of these Risk Principles is to provide DCMs with appropriate flexibility to take reasonably designed measures relevant to individual markets, and improve those measures as markets evolve.

The Commission confirms that the reasonableness standard is an objective one and there is no presumption of reasonableness. While there are differences among DCMs, what one DCM may implement in terms of rules and controls to address material market disruptions may be relevant to assessing another DCM's compliance. For example, if the Commission finds that a

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[152] *See* NPRM at 42763.

particular DCM is an outlier in terms of rules or controls, this may cause the Commission to inquire further whether there are legitimate reasons for the differences.

The Commission confirms that DCMs may need to impose additional rules on their market participants, or implement additional controls, if their rules and controls do not objectively satisfy the Risk Principles. The Risk Principles are principles-based and allow for DCM discretion in compliance, but they are nevertheless enforceable regulations. Market participants should not interpret the Commission's statements in this preamble to articulate any particular evidentiary standard in an enforcement action.

## C. Risk Principle 1

### 1. Proposal

In Risk Principle 1, the Commission proposed that a DCM must adopt and implement "rules" governing market participants subject to its jurisdiction to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading.[153] The Commission proposed that Risk Principle 1 (and the other Risk Principles) apply to all electronic trading.

### 2. Rules versus Controls and Other Procedures

#### a. Summary of Comments

Several commenters addressed Risk Principle 1's requirement that DCMs implement "rules." CME suggested Risk Principle 1 should focus on rules on participants and their conduct that are enforced through administrative or disciplinary processes; an example is CME Group's Messaging Efficiency Policy.[154] Other examples CME provided include trade practice and disciplinary rules and CME's disruptive trading practices rule (Rule 575), which CME amended

[153] NPRM at 42776.
[154] CME NPRM Letter, at 5.

in 2020 to provide that it is a violation "for a participant to intentionally or recklessly engage in activity that has the *potential* to disrupt the systems of the Exchange."[155]

Better Markets and MGEX also commented on the term "rule."[156] Better Markets stated the Commission should clarify that "rules" include internal policies, procedures, controls, advisories, and trading protocols contemplated in the broad definition in 40.1.[157] MGEX commented that the Commission should ensure "rules," as described in the NPRM, include non-rules such as policies, procedures, protocols, and controls.[158]

CFE stated a DCM should be able to satisfy Risk Principle 1 through implementing internal systems, processes, and procedures, not just rules.[159] For example, CFE commented a DCM may not want to publicly disclose how it monitors particular markets.[160] CFE asserted requiring a DCM to describe in its rules how it monitors for market disruptions and system anomalies is administratively burdensome and may disincentivize a DCM from improving its systems.[161]

CEWG stated DCM rules adopted pursuant to Risk Principles 1 and 2 should be subject to Commission approval under Commission regulation § 40.5 or self-certification under Commission regulation § 40.6.[162] CEWG asserted a transparent regulatory process would ensure that new DCM rules are appropriately tailored.[163]

**b. Discussion**

[155] *Id.* at 5-6 (emphasis in original).
[156] Better Markets NPRM Letter, at 10; MGEX NPRM Letter, at 2, 4.
[157] Better Markets NPRM Letter, at 10.
[158] MGEX NPRM Letter, at 2, 4.
[159] CFE NPRM Letter, at 3.
[160] *Id.*
[161] *Id.*
[162] CEWG NPRM Letter, at 7.
[163] *Id.*

With respect to the comments addressing the scope of the term "rule" in Risk Principle 1, the Commission emphasizes that the term is intended to have the meaning set forth in part 40 of the Commission's regulations. Specifically, the Commission clarifies that for purposes of Risk Principle 1 and the Acceptable Practices, the term "rule" has the meaning set forth in existing Commission regulation § 40.1(i), which provides:

> "*Rule* means any constitutional provision, article of incorporation, bylaw, rule, regulation, resolution, interpretation, stated policy, advisory, terms and conditions, trading protocol, agreement or instrument corresponding thereto, including those that authorize a response or establish standards for responding to a specific emergency, and any amendment or addition thereto or repeal thereof, made or issued by a registered entity or by the governing board thereof or any committee thereof, in whatever form adopted."[164]

This definition of "rule" is broad and can include policies, procedures, protocols, and controls that are not public.[165] DCM policies and other internal procedures addressing market disruption risk could also satisfy Risk Principle 1.

Commission regulation § 40.1(i) would require rules to be approved or self-certified pursuant to part 40 regulations, though DCMs would be entitled to request confidential treatment pursuant to the procedures in Commission regulation § 40.8(c) with respect to such filings.[166] In particular, under Risk Principle 1, a DCM would be required to submit rules to the Commission in accordance with either: (a) Commission regulation § 40.5, which provides procedures for the voluntary submission of rules for Commission review and approval; or (b) Commission regulation § 40.6, which provides procedures for the self-certification of rules with the Commission.[167]

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[164] 17 CFR 40.1(i).

[165] Under part 40, a DCM's filing of rules under Commission regulations §§ 40.5 or 40.6 shall be treated as public information, *unless* accompanied by a request for confidential treatment. *See* 17 CFR 40.8(c).

[166] 17 CFR 40.8(c).

[167] *See* 17 CFR 40.5, 40.6.

The part 40 rule submission process will ensure that new rules that DCMs implement to address the risk of market disruption—including internal processes—will be subject to appropriate Commission review and oversight. With respect to self-certifications, the Commission stated in the preamble to the part 40 final rules: "[T]he explanation and analysis of certified rules or rule amendments should be a clear and informative—but not necessarily lengthy—discussion of the submission, the factors leading to the adoption of the rule or rule amendment, and the expected impact of the rule or rule amendment on the public and market participants."[168]

**3. Scope of Electronic Trading Subject to DCM Rules**

**a. Summary of Comments**

Several commenters addressed the scope of orders and trades subject to Risk Principle 1. ICE supported requiring DCMs to subject all electronic orders to exchange-based pre-trade risk controls, because all persons that trade electronically have the potential to disrupt markets.[169] CFE asked the Commission to clarify that under Risk Principle 1, DCMs may have rules governing market participants subject to the DCM's jurisdiction that are applicable to a subset of market participants, as long as those rules apply to all electronic orders submitted to the DCM.[170] IATP supported requiring DCMs to implement separate risk controls for cleared and uncleared trades.[171] IATP asserted uncleared trades pose greater counterparty credit risks, so the Risk

[168] Part 40 final rules, 75 FR 44776, 44782-83 (July 27, 2011). The Commission further noted that it "requires registered entities to provide a more detailed explanation and analysis of rules voluntarily submitted for Commission approval under the provisions of § 40.5." *Id.* at 44782. *See also* 17 CFR 40.6(a)(7) (setting forth rule submission requirements).

[169] ICE NPRM Letter, at 3.

[170] CFE NPRM Letter, at 1-2.

[171] IATP NPRM Letter, at 10.

Principles should require post-trade risk controls to prevent post-trade contract defaults and other credit events.[172]

**b. Discussion**

The Commission is adopting Risk Principle 1 as proposed, but clarifies that a DCM may have rules that apply to only a subset of market participants. The Commission understands that DCMs have markets with a broad range of market participants and trading patterns. The Commission believes that DCMs should have reasonable discretion to determine whether risk controls should be different for different types of trading activity. Indeed, it may not be advisable for a DCM to impose the same rules under Risk Principle 1 on all types of market participants and trading activity present on the DCM's platforms. The Commission's principles-based approach to the Risk Principles gives DCMs the flexibility to impose the most efficient and effective rules and pre-trade risk controls for their respective markets. The Commission believes Risk Principle 1 will help ensure DCMs continue to monitor risks as they evolve along with the markets, and make reasonable changes as appropriate to address those evolving risks.[173]

In response to IATP's comment supporting a separate set of risk controls on uncleared trades, the Commission notes that all transactions on or pursuant to the rules of a DCM must be cleared. As a result, any such separate set of risk controls would be on a null set of trades.[174]

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[172] *Id.*

[173] NPRM at 42767.

[174] The Commission has explained that "all transactions executed on or through a DCM must be cleared through a Commission-registered DCO." *See* Core Principles and Other Requirements for Designated Contract Markets, 77 FR 36612, 36646 (June 19, 2012).

### D. Risk Principle 2 – Risk Controls Listed in Part 38

#### 1. Proposal

Risk Principle 2 requires DCMs to subject all electronic orders to exchange-based pre-trade risk controls to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading.

The Commission noted in the NPRM that certain existing provisions in part 38 list appropriate DCM-implemented risk controls.[175] For example, existing Commission regulation § 38.255 mandates exchange-based risk controls to prevent and reduce the potential risk of market disruptions.[176] In addition, existing Core Principle 4's Acceptable Practices[177] list appropriate risk controls, and proposed Risk Principle 2 does not change those Acceptable Practices.

#### 2. Summary of Comments

CME, ICE, and MGEX agree with the Commission that the controls listed in existing acceptable practices are sufficient. CME stated the controls listed in the existing acceptable practices are effective at preventing or mitigating market disruptions, and the Commission should not list any others as part of proposed Commission regulation § 38.251(f).[178] ICE commented there is not one set of risk controls that are most effective in preventing market disruptions.[179] ICE further asserted the proposed Acceptable Practices for proposed Commission regulation § 38.251(f) and the guidance provided in existing Appendix B(b)(5) provide DCMs

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[175] *See* NPRM at 42767-68.
[176] *See id.* at 42768.
[177] *See* Appendix B to Part 38—Guidance on, and Acceptable Practices in, Compliance with Core Principles, Core Principle 4 (Subparagraph (b)).
[178] CME NPRM Letter, at 14.
[179] ICE NPRM Letter, at 7.

sufficient discretion to adopt appropriate risk controls.[180] MGEX stated the controls outlined in existing Acceptable Practices for Core Principle 2 are sufficient.[181]

In contrast, IATP commented that Risk Principle 2 should include post-trade risk controls to help protect market participants against credit events resulting from DCM negligence in the design, implementation and enforcement of its rules and risk controls.[182] IATP stated this would follow the FIA recommendation on post-trade risk controls.[183]

### 3. Discussion

The Commission is adopting Risk Principle 2 as proposed and is not adding specific controls to the regulation text or Acceptable Practices. As discussed in the NPRM, the purpose of Risk Principle 2 is to require DCMs to consider market participants' trading activities when designing and implementing exchange-based risk controls to address market disruptive events.[184] Risk Principle 2 provides clarity to DCMs that their exchange-based risk controls must address market disruptions caused by electronic trading, including those related to price movements as well as other events that impair market participants' ability to trade.[185]

Consistent with the comments received from CME, ICE, and MGEX, the Commission believes the existing Acceptable Practices set forth in Core Principle 4 list appropriate risk controls. Specifically, the Acceptable Practices in existing Core Principle 4 list risk controls including pre-trade limits on order size, price collars or bands around the current price, message

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[180] *Id.* at 8.
[181] MGEX NPRM Letter, at 2.
[182] IATP NPRM Letter, at 10.
[183] *Id.*
[184] NPRM at 42767.
[185] *Id.* at 42768.

throttles, and daily price limits.[186] The Commission declines to impose additional pre-trade or post-trade risk control requirements on DCMs. The Commission does not consider such requirements to be necessary or consistent with the Commission's principles-based approach to the Risk Principles.

## E. Risk Principle 3

### 1. Proposal

The Commission proposed in Risk Principle 3 that a DCM must promptly notify Commission staff of a "significant" disruption to its electronic trading platform(s) and provide timely information on the causes and remediation.

In the NPRM, the Commission stated the required notification under Risk Principle 3 would take a form similar to current Commission regulation § 38.1051(e) notification.[187] Further, the Commission differentiated Risk Principle 3 from existing Commission regulation § 38.1501(e) by noting that, rather than addressing a DCM's internal technological systems, Risk Principle 3 addresses malfunctions of the technological systems of trading firms and other non-DCM market participants that cause disruptions of the DCM's trading platform.

In addition, the Commission asked commenters to describe circumstances in which it would be appropriate for a DCM to notify other DCMs about a significant market disruption on its trading platform(s). The Commission asked whether proposed Risk Principle 3 should include such a requirement.

### 2. "Significant" Standard

#### a. Summary of Comments

[186] *See* Appendix B to Part 38—Guidance on, and Acceptable Practices in, Compliance with Core Principles, Core Principle 4 (Subparagraph (b)).
[187] NPRM at 42769.

Better Markets, CME, and ICE believed the term "significant" in Risk Principle 3 is unclear. Better Markets asserted that expectations regarding timing and substance of reporting "significant market disruptions" are imprecise and unenforceable.[188] Better Markets stated DCMs must know what to report, where to report it, when to report it, and under what circumstances reporting is required.[189] Better Markets further stated Risk Principle 3 fails to (i) provide a formal definition of market disruptions, (ii) indicate when disruptions cross the significance threshold, or (iii) identify the level of detail necessary to notify the CFTC sufficiently.[190]

CME stated that while Risk Principle 3 appears to require impact to both the operation of the DCM *and* market participants, Risk Principles 1 and 2 seem to require impact to operation of the DCM *or* market participants.[191] CME also commented that to be subject to the notification requirement, Risk Principle 3 provides a significant disruption must "materially affect" the DCM and market participants.[192] CME supported clarifying the distinction between "significant" and "material."[193]

MFA and MGEX supported the use of the term "significant" in Risk Principle 3. MFA believed the definition of "significant" establishes a threshold for when notification is required and will promote meaningful reporting and oversight.[194] MFA agreed that an internal disruption in a market participant's own trading system "should not be considered significant unless it causes a market disruption materially affecting the DCM's trading platform and other market

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[188] Better Markets NPRM Letter, at 2.
[189] *Id.* at 9.
[190] *Id.* at 10.
[191] CME NPRM Letter, at 8.
[192] *Id.*
[193] *Id.*
[194] MFA NPRM Letter, at 3.

participants."[195] MGEX believed that "significant disruption" provides DCMs with discretion to interpret events in light of the unique nature of markets and products across DCMs and platforms.[196]

**b. Discussion**

The Commission acknowledges the term "significant" could be susceptible to varying degrees of application based on a particular DCM's business model and particular market. However, the Commission believes in practice Risk Principle 3 provides a workable standard for notifications.[197] This has proven to be the case with respect to existing Commission regulation § 38.1051(e), which requires DCMs to notify Commission staff of, among other things, "significant" system malfunctions.[198] The Commission notes it originally proposed that DCMs must report to the Commission *all* system malfunctions under Commission regulation § 38.1051(e).[199] In response, CME commented that such a notification requirement would be overly broad.[200] The Commission considered CME's comment and concluded "that timely advance notice of *all* planned changes to address system malfunctions is not necessary and is revising the rule to provide that DCMs only need to promptly advise the Commission of all *significant* system malfunctions."[201] Thus, similar to the "significant" standard under Risk Principle 3, DCMs are already subject to a "significant" threshold for notification with respect to system safeguards rules. The Commission does not consider it appropriate or necessary to

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195 *Id.*
196 *Id.* at 4.
197 *See* Section II.A.2(c), discussing "significant" and "material." In addition, in response to CME's comment, a market disruption for purposes of all three Risk Principles requires impact to operation of the DCM *or* market participants.
198 *See* 17 CFR 38.1051(e).
199 *See* Core Principles and Other Requirements for Designated Contract Markets, *supra* note 174, at 36657-58.
200 *Id.* at 36658.
201 *Id.* (emphasis added).

require DCMs to notify Commission staff of *all* market disruptions pursuant to Risk Principle 3, especially given that such a rule would be more burdensome on DCMs than a mandate that they report only "significant" market disruptions to the Commission.

### 3. Notification Requirement

#### a. Summary of Comments

CME stated that it is unsure of the practical utility to the Commission of receiving notifications under Risk Principle 3, since the Commission already collects such information through other means.[202] Better Markets asserted the CFTC should require part 40 filings, as opposed to e-mail notifications.[203]

CME asserted the distinction from Commission regulation § 38.1051(e) is clear; an incident could disrupt the trading platform without there having been a system malfunction on the platform.[204] CME gave as an example an incident originating with a participant that causes a match engine to failover to backup.[205] CME further stated both notification provisions could be triggered by an incident arising with a participant that causes both a market disruption and a system malfunction.[206]

CEWG stated Risk Principle 3 appears to apply a *per se* standard for reporting, which leaves market participants open to potential enforcement risk.[207] CEWG asserted the Commission should revise Risk Principle 3 to require notifications only where disruptions result from grossly negligent or reckless conduct with respect to a market participant's obligations to implement and maintain pre-trade risk controls, conduct due diligence or testing, as well as

[202] CME NPRM Letter, at 16.
[203] Better Markets NPRM Letter, at 10.
[204] CME NPRM Letter, at 14-15.
[205] *Id.*
[206] *Id.* at 15.
[207] CEWG NPRM Letter, at 5.

appropriate risk mitigation measures consistent with applicable DCM rules or accepted industry practices related to electronic trading activity.[208]

ICE recommended the Commission define what constitutes a "significant disruption" of a DCM trading platform and how it differs from a "market disruption," *e.g.*, whether a transient disruption, which temporarily results in prices not reflecting market fundamentals, would be reportable.[209] ICE supported the Commission incorporating into Risk Principle 3 the requirement that a significant disruption be caused by a "malfunction of a market participant's trading system."[210] ICE asserted the addition of this language would help to differentiate the reporting obligations under Commission regulation § 38.1051(e).[211]

In response to the question in the NPRM asking if Risk Principle 3 should require a DCM to notify other DCMs of a significant market disruption, CME and ICE indicated Risk Principle 3 should not include such a requirement. ICE stated current Appendix B(b)(5) provides guidance on coordinating risk controls for linked or related contracts.[212] ICE asserted in circumstances of a significant market disruption, it would be prudent for such coordination to include notification to impacted markets, at least though a market alert.[213] CME noted there are already real-time data feeds and other public sources that provide information on whether a DCM is experiencing a significant market disruption.[214] CME further noted if this proposal is adopted, all DCMs will be required to report to the Commission, negating the need for notice between DCMs.[215]

**b. Discussion**

[208] *Id.* at 6.
[209] ICE NPRM Letter, at 4.
[210] *Id.*
[211] *Id.*
[212] CME NPRM Letter, at 15; ICE NPRM Letter, at 9.
[213] ICE NPRM Letter, at 9.
[214] CME NPRM Letter, at 15.
[215] *Id.*

The Commission is finalizing the notification requirement in Risk Principle 3 as proposed, with one clarification. In the NPRM, Risk Principle 3 referred to "significant disruptions to" a DCM's platform(s). Consistent with Risk Principles 1 and 2, which use the term "market disruption," the Commission is revising Risk Principle 3 to state a DCM must promptly notify Commission staff of any "significant *market* disruptions on" its platform(s). The purpose of this revision is to clarify that the notification requirement in Risk Principle 3 applies to a subset of the market disruptions under Risk Principles 1 and 2, *i.e.*, to those market disruptions that are "significant." Consistent with the comments received, the Commission is not including a requirement that a DCM notify other DCMs in the event of a significant market disruption.[216]

In response to comments questioning the utility of notifications,[217] the Commission reiterates its view that the notification requirement under Risk Principle 3 will assist the Commission's oversight and its ability to monitor and assess market disruptions across all DCMs. The Commission expects notification under Risk Principle 3 to take a similar form to the current notification process for electronic trading halts, cybersecurity incidents, or activation of a DCM's business continuity-disaster recovery plan under Commission regulation § 38.1051(e). Specifically, the Commission would expect such notification to consist of an email containing sufficient information to convey the nature of the market disruption, and if known, its cause, and the remediation.

In response to CEWG's comment, the Commission declines to limit the notification requirement in Risk Principle 3 to instances of "grossly negligent" or "reckless" conduct. The Commission considers such qualifiers to be overly limiting and unduly burdensome on DCMs that would be required to determine whether conduct constitutes gross negligence or

[216] In response to ICE's comment, see discussion at Section II.A.2(c) addressing "significant" and "material."
[217] *See* CME NPRM Letter, at 16.

recklessness. In addition, the Commission reiterates that an email notification is the appropriate form of Risk Principle 3 notification. Requiring such notifications to be in the form of part 40 filings would be overly burdensome to exchanges given the Commission's estimate of 0-25 notifications per year. Moreover, in the context of significant market disruptions, prompt email notification is preferable to the inherently slower process of part 40 filings.

## III. Related Matters

### A. Regulatory Flexibility Act

The Regulatory Flexibility Act ("RFA") requires federal agencies, in promulgating regulations, to consider the impact of those regulations on small entities, and to provide a regulatory flexibility analysis with respect to such impact. The regulations adopted in this final rulemaking will affect DCMs. The Commission previously determined that DCMs are not "small entities" for purposes of the RFA because DCMs are required to demonstrate compliance with a number of Core Principles, including principles concerning the expenditure of sufficient financial resources to establish and maintain an adequate self-regulatory program.[218] The Commission received no comments on the impact of the rules described in the NPRM on small entities. Therefore, the Chairman, on behalf of the Commission, hereby certifies, pursuant to 5 U.S.C. 605(b), that the regulations adopted by this final rulemaking will not have a significant economic impact on a substantial number of small entities.

### B. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 ("PRA") imposes certain requirements on federal agencies, including the Commission, in connection with conducting or sponsoring any

[218] *See* Policy Statement and Establishment of Definitions of "Small Entities" for Purposes of the Regulatory Flexibility Act, 47 FR 18618, 18619 (Apr. 30, 1982).

"collection of information," as defined by the PRA.[219] Under the PRA, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number from the Office of Management and Budget ("OMB"). The PRA is intended, in part, to minimize the paperwork burden created for individuals, businesses, and other persons as a result of the collection of information by federal agencies, and to ensure the greatest possible benefit and utility of information created, collected, maintained, used, shared, and disseminated by or for the federal government. The PRA applies to all information, regardless of form or format, whenever the federal government is obtaining, causing to be obtained, or soliciting information, and includes required disclosure to third parties or the public, of facts or opinions, when the information collection calls for answers to identical questions posed to, or identical reporting or recordkeeping requirements imposed on, ten or more persons.

The final rulemaking modifies the following existing collections of information previously approved by OMB and for which the Commission has received control numbers: (i) OMB control number 3038–0052, Core Principles and Other Requirements for DCMs ("OMB Collection 3038-0052") and OMB control number 3038-0093, Provisions Common to Registered Entities ("OMB Collection 3038-0093"). The Commission does not believe the Risk Principles as adopted impose any other new collections of information that require approval of OMB under the PRA.

The Commission requests that OMB approve and revise OMB control numbers 3038-0052 and 3038-0093 in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11.

**1. OMB Collection 3038-0093 – Provisions Common to Registered Entities**

[219] 44 U.S.C. 3501 et seq.

Final Commission regulation § 38.251(e) ("Risk Principle 1") provides that DCMs must adopt and implement rules governing market participants subject to their respective jurisdictions to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. As provided in subparagraph (b)(6) of Appendix B to part 38, such rules must be reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. Any such rules a DCM adopts pursuant to Commission regulation § 38.251(e) must be submitted to the Commission in accordance with part 40 of the Commission's regulations. Specifically, a DCM is required to submit such rules to the Commission in accordance with either: (a) Commission regulation § 40.5, which provides procedures for the voluntary submission of rules for Commission review and approval; or (b) Commission regulation § 40.6, which provides procedures for the self-certification of rules with the Commission. This information collection is required for DCMs as needed, on a case-by-case basis. The Commission acknowledges that various DCM practices in place today may be consistent with Commission regulation § 38.251(e), such as rules requiring market participants to use exchange-provided risk controls that address potential price distortions and related market anomalies. Accordingly, it is possible that some DCMs would not be required to file new or amended rules to satisfy Risk Principle 1.

Commission regulation § 38.251(e) amends OMB Collection 3038-0093 by increasing the existing annual burden by an additional 48 hours[220] for DCMs that would be required to comply with part 40 of the Commission's regulations. As a result, the revised total annual burden

[220] The Commission estimates that final Commission regulation § 38.251(e) would require potentially 17 DCMs to make 2 filings with the Commission a year requiring approximately 24 hours each to prepare. Accordingly, the total burden hours for each DCM would be approximately 48 hours per year.

under this amended collection would increase by 816 hours.[221] Although the Commission believes that operational and maintenance costs for DCMs in Commission regulation § 38.251(e) will incrementally increase, these costs are expected to be *de minimis*.

The Commission has previously estimated the combined annual burden hours for both Commission regulations §§ 40.5 and 40.6 to be 7,000 hours. Upon implementation of final Commission regulation § 38.251(e), the Commission estimates that 17 exchanges may each make two rule filings under Commission regulations § 40.5 or § 40.6 per year for a total of 34 submissions for all DCMs.[222] The Commission further estimates that the exchanges may employ a combination of in-house and outside legal and compliance personnel to update existing rulebooks and it will take 24 hours to complete and file each rule submission for a total of 48 burden hours for each exchange and 816 burden hours for all exchanges.

OMB Collection 3038-0093 was created to cover the Commission's part 40 regulatory requirements for registered entities (including DCMs, SEFs, DCOs, and swap data repositories) to file new or amended rules and product terms and conditions with the Commission.[223] OMB Control Number 3038-0093 covers all information collections in part 40, including Commission regulation § 40.2 (Listing products by certification), Commission regulation § 40.3 (Voluntary submission of new products for Commission review and approval), Commission regulation § 40.5 (Voluntary submission of rules for Commission review and approval), and Commission regulation § 40.6 (Self-certification of rules). Commission regulation § 38.251(e) adopted in this

[221] The Commission estimates that the total additional aggregate annual burden hours for DCMs under final Commission regulation § 38.251(e) would be 816 hours based on each DCM incurring 48 burden hours (17 x 48 = 816).
[222] The Commission revised the number of potential respondent-DCMs to 17 in order to reflect the number of DCMs currently registered with the Commission.
[223] *See* 17 CFR part 40.

final rulemaking modifies the existing annual burden in OMB Collection 3038-0093, increasing the annual burden estimates in aggregate below:

Estimated number of respondents: 17

Estimated frequency/timing of responses: As needed.

Estimated number of annual responses per respondent: 2

Estimated number of annual responses for all respondents: 34

Estimated annual burden hours per response: 24

Estimated total annual burden hours per respondent: 48

Estimated total annual burden hours for all respondents: 816

**2. OMB Collection 3038-0052 – Core Principles and Other Requirements for DCMs**

Final Commission regulation § 38.251(g) ("Risk Principle 3") requires a DCM to promptly notify Commission staff of any significant market disruption on its electronic trading platform(s) and provide timely information on the cause and remediation of such disruption.[224] Risk Principle 3 further requires that such notification contain sufficient information to convey the nature of the disruption, and if known, its causes, and remediation. The Commission recognizes that the specific cause of the market disruption and the attendant remediation may not be known at the time of the disruption and may have to be addressed in a follow-up email or report. This information collection will be required for DCMs as needed, on a case-by-case basis.

The Commission received one comment regarding its PRA burden analysis in the preamble to the NPRM.[225] CME in its comment letter asserted the operation of Risk Principle 3 is unclear, and the Commission's estimate of approximately 50 notifications per year is "so far from what we would have anticipated being required under this proposal that it merits

[224] *See supra* Section II.E. (discussion of the Risk Principle 3).
[225] *See* CME NPRM Letter, at 8.

discussion."[226] CME also indicated it questions "whether the Commission has an interpretation of 'significant disruption' that is not reflected in its proposal" based on the apparent differences in notification estimates by the Commission and CME.[227]

CME further described that since 2011, "the CME Group DCMs have brought approximately 59 disciplinary actions for electronic trading activity that may have disrupted markets or other participants."[228] However, based on CME's review of those disciplinary actions, the exchange only identified three cases that it believes could be considered to have caused a significant disruption to the operations of the DCM. CME did not in its comments explain how its estimate was determined or what criteria or standard was employed as part of this analysis.

As described above, CME is using the number of actual disciplinary actions brought against market participants for disruptions that could be detrimental to the exchange as a "proxy" for the "substantial disruption" standard set forth in Risk Principle 3. Without indicating what analysis it may have used or considered, CME asserted that only three disciplinary actions could be considered to have caused a significant disruption to the operations of CME.[229] Although the Commission appreciates CME's comments regarding the potential number of reportable events in connection with final Commission regulation § 38.251(g), the Commission does not believe the number of actual disciplinary cases brought by an exchange is an appropriate proxy for reportable market disruption events.[230] The Commission notes that in many instances, basing the

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[226] *See id*.
[227] *See id*.
[228] *See id*. at 9.
[229] The NPRM cited events at CME DCMs, including a disciplinary action from 2011, as examples of DCMs policing electronic trading activities that may be detrimental to the DCM.
[230] The Commission submits that a reportable event does not necessarily mean that a disciplinary case is required, but instead suggests that there has been a problem with the operation of the electronic trading platform that requires

reportable event on whether it is subject to a formal disciplinary action would be under-inclusive. In addition, what is a "significant" market disruption on one exchange may differ from another, based on market participant differences, the exchange's respective market structure, and the technology of the underlying exchange marketplace.

The Commission submits that its original estimate of the reportable events under Commission regulation § 38.251(g) may be too high for some exchanges. However, the Commission does not believe an estimate of three reportable events since 2011, based on the number of disciplinary actions in the past, is a reasonable proxy. Therefore, the Commission asserts that a range of reportable events between 0-25 may better reflect the potential number of reportable significant market disruption events for each DCM. The Commission is accordingly revising collection 3038-0052 to reflect the range of potential annual reportable events by each DCM to be between 0 and 25, reflecting the differences in DCM structure and operations and the market participants accessing those DCMs.

In connection with the request for comment in the NPRM regarding whether the proposed information collections are necessary for the proper performance of Commission functions, CME stated it is "unsure of the practical utility to the Commission of receiving notifications from a DCM pursuant to draft Principle III. From a market oversight perspective, the Commission already (at least with the CME Group DCMs) collects information on these types of events through regular engagement and review of a DCM's compliance with core principles."[231] The Commission does not agree with CME's assertion that the notification may serve no practical utility based on the assumption that the Commission collects this type of

additional review and oversight. Accordingly, the notification of a significant market disruption would typically start a specific regulatory oversight process by the Commission—not establish the particular requirements that may or may not merit the bringing of a disciplinary action, as CME suggests.

[231] CME NPRM Letter, at 16.

information from CME through regular engagement and review of CME's compliance with core principles. As described above in Section II.E, the purpose of the notification requirement adopted in Commission regulation § 38.251(g) is for Commission staff to receive prompt notice of a market disruption impacting a DCM's trading platform(s). This notification is intended to assist the Commission in its oversight of the derivatives markets with the ability to monitor and assess market disruptions across DCMs on a near real-time basis. CME's argument that the current "regular" engagement and review of CME's compliance with core principles is sufficient for this purpose is not persuasive and would not provide the Commission with sufficient capability to address and monitor significant market disruptions on a near real-time basis.

Additionally, CME further commented on the Commission's request in the NPRM relating to whether there are ways to minimize the burden of the proposed collections of information on DCMs, including through the use of appropriate automated, electronic, mechanical, or other technological information collection techniques. In its comment to this request, CME indicated that it "currently provides CFTC staff near real-time notifications of velocity logic events. We separately provide the CFTC a daily file containing information related to events that occur on the match engine (*e.g.*, velocity logic events, circuit breakers, etc.). These types of automated reports or notifications are highly efficient and effective means to provide CFTC staff pertinent information."[232] Although the Commission finds the daily file that CME voluntarily provides relating to velocity logic events[233] to be helpful in certain circumstances, the Commission believes that a uniform standard across DCMs relating to "reportable events" for

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[232] *Id.*

[233] "Velocity Logic" is addressed on CME's website. Generally, it is "designed to detect market movement of a predefined number of ticks either up or down within a predefined time." Velocity Logic introduces a momentary suspension in matching by transitioning the futures instrument(s) and related options into the Pre-Open or Reserved/Pause State. *See* CME Velocity logic, *available at* https://www.cmegroup.com/confluence/display/EPICSANDBOX/Velocity+Logic.

significant market disruption events is necessary for its oversight and regulatory responsibilities under the CEA. For this reason, the Commission notes that the notification requirement is a foundational requirement of the current rulemaking that is expected to provide greater transparency and awareness to the Commission regarding market disruptions associated with electronic trading.

The Commission has previously estimated the combined annual burden hours for part 38 to be 7,357.5 hours. Upon implementation of final Commission regulation § 38.251(g), the Commission estimates that OMB Collection 3038-0052 will be revised by increasing the number of annual responses by a range between 0 and 25 notifications to Commission staff per year for a total range of between 0 and 425[234] notifications for all DCMs. The Commission has also revised the number of potential respondent-DCMs to 17 in order to reflect the number of DCMs currently registered with the Commission. The Commission further estimates that the DCMs may employ a combination of in-house and outside legal and compliance personnel to review and prepare significant market disruption event notifications to Commission staff and it will take approximately 5 burden hours to prepare each notification resulting in a range of burden hours between 0 and 125[235] for each event notification across DCMs and a total range of between 0 and 2,125 burden hours annually for all notifications to Commission staff required for all DCMs.[236] Although the Commission believes that operational and maintenance costs for DCMs

[234] Based on the annual aggregate range of potential notifications under final Commission regulation § 38.251(g) from 0 to 425 for all DCMs, the Commission estimates that the average annual aggregate notifications for all DCMs is 212.50 with the annual average number of notifications per DCM to be 13.28.

[235] The Commission estimates that final Commission regulation § 38.251(g) would require potentially each DCM to make between 0 and 25 reports with the Commission a year requiring approximately 5 hours each to prepare. Accordingly, the total burden hour range for each DCM would be between approximately 0 and 125 hours per year (0 x 5 = 0 and 25 x 5 = 125).

[236] The Commission estimates that the total aggregate annual burden hours for DCMs under final Commission regulation § 38.251(g) would be a range between 0 and 2,125 hours based on each DCM incurring between 0 hours (0 x 17 = 0 burden hours) and 2,125 hours (125 x 17 = 2,125 burden hours). Based on these estimates, the

in Commission regulation § 38.251(g) will incrementally increase, these costs are expected to be *de minimis*.

OMB Collection 3038-0052 was created to cover regulatory requirements for DCMs under part 38 of the Commission's regulations.[237] OMB Control Number 3038-0052 covers all information collections in part 38, including Subpart A (General Provisions), Subparts B through X (the DCM core principles), as well as the related appendices thereto, including Appendix A (Form DCM), Appendix B (Guidance on, and Acceptable Practices in, Compliance with Core Principles), and Appendix C (Demonstration of Compliance That a Contract Is Not Readily Susceptible to Manipulation). Commission regulation § 38.251(g) adopted in this final rulemaking modifies the existing annual burden in OMB Collection 3038-0052 for complying with certain requirements in Subpart E (Prevention of Market Disruption) of part 38, as estimated in aggregate below:

Estimated number of respondents: 17

Estimated frequency/timing of responses: As needed.

Estimated number of annual responses per respondent: 0-25

Estimated number of annual responses for all respondents: 0-425

Estimated annual burden hours per response: 5

Estimated total annual burden hours per respondent: 0-125

Estimated total annual burden hours for all respondents: 0-2,125

Estimated aggregate annual recordkeeping burden hours: 0- 850[238]

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Commission has determined the annual average aggregate burden hours for all DCMs to be 1,062.50 burden hours and the annual average burden hour for each DCM to be 66.406 burden hours.

[237] *See* 17 CFR 38.

[238] The Commission estimates that additional total aggregate annual recordkeeping burden hours for DCMs under Commission regulations §§ 38.950 and 38.951 as a result of the final regulations under this rulemaking would be

## C. Cost-Benefit Considerations

### 1. Introduction

Section 15(a) of the CEA requires the Commission to consider the costs and benefits of its actions before promulgating a regulation under the CEA or issuing certain orders.[239] Section 15(a) further specifies that the costs and benefits shall be evaluated in light of five broad areas of market and public concern: (1) protection of market participants and the public; (2) efficiency, competitiveness, and financial integrity of futures markets; (3) price discovery; (4) sound risk management practices; and (5) other public interest considerations. The Commission considers the costs and benefits resulting from its discretionary determinations with respect to the section 15(a) factors.

The baseline for the consideration of costs and benefits in this final rulemaking is the monitoring and mitigation capabilities of DCMs, as governed by rules in current part 38 of the CFTC's regulations. Under these rules, DCMs are required to conduct real-time monitoring of all trading activity on their electronic trading platforms and identify disorderly trading activity and any market or system anomalies.[240]

The Commission recognizes that the final electronic trading risk principles rules may impose additional costs on DCMs and market participants. The Commission has endeavored to assess the expected costs and benefits of the final rulemaking in quantitative terms, including PRA-related costs, where possible. In situations where the Commission received quantitative

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between 0 and 850 hours based on each DCM incurring between 0 and 50 burden hours (17 x 0 = 0 and 17 x 50 = 850). These estimates are based on the range of notifications expected to be between 0-25 per DCM annually. The Commission estimates that each DCM would require 2 burden hours in connection with its recordkeeping obligations under Commission regulations §§ 38.950 and 38.951. Based on these estimates, the Commission also calculates the annual average aggregate recordkeeping burden hours for all DCMs to be 400 burden hours and the annual average recordkeeping burden hour for each DCM to be 25 burden hours.

[239] 7 U.S.C. 19(a).

[240] *See* existing Commission regulations §§ 38.250, 38.251, 38.255 and Appendix B to Part 38—Guidance on, and Acceptable Practices in, Compliance with Core Principles, Core Principle 4 (Subparagraph (b)).

data related to the cost-benefit estimates proposed in the NPRM, the Commission included them in the cost-benefit considerations of this final rulemaking. The Commission also acknowledges and took into consideration qualitative comments with regard to the cost-benefit estimates in the NPRM. When the Commission is unable to quantify the costs and benefits, the Commission identifies and considers the costs and benefits of the final rules in qualitative terms.

**a. Summary of the Rule**

As discussed in more detail in the preamble above, after considering various comments submitted by the commenters, the Commission decided on a principles-based approach and to give discretion to each DCM in terms of how to define precisely market disruptions and system anomalies as they relate to their particular markets. As a result, each DCM will have the flexibility to tailor the implementation of the rules to best prevent, detect, and mitigate market disruptions or system anomalies in their respective markets. This flexibility should mitigate the cost and burden associated with DCMs' implementation of the Risk Principles. Therefore, the Commission adopts the following specific Risk Principles and associated Acceptable Practices applicable to DCM electronic trading as proposed.[241]

**i. Commission Regulation § 38.251(e)—Risk Principle 1**

Commission regulation § 38.251(e)—Risk Principle 1—provides that a DCM must adopt and implement rules governing market participants subject to its jurisdiction to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading.

**ii. Commission Regulation § 38.251(f)—Risk Principle 2**

[241] As discussed above, the Commission revised Risk Principle 3 to change the phrase "disruptions to" to "market disruptions on." *See supra* Section II.E.

Commission regulation § 38.251(f)—Risk Principle 2—provides that a DCM must subject all electronic orders to exchange-based pre-trade risk controls to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading.

**iii. Commission Regulation § 38.251(g)—Risk Principle 3**

Commission regulation § 38.251(g)—Risk Principle 3—provides that a DCM must promptly notify Commission staff of a significant market disruption on its electronic trading platform(s) and provide timely information on the causes and remediation.

**iv. Acceptable Practices for Commission Regulations §§ 38.251(e) and (f)**

The Acceptable Practices provide that, to comply with Commission regulation § 38.251(e), a DCM must adopt and implement rules that are reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. To comply with Commission regulation § 38.251(f), the Acceptable Practices provide that the DCM must subject all electronic orders to exchange-based pre-trade risk controls that are reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies.

**2. Costs**

**a. Costs of Adjustments to Existing Practices**

**i. Summary of Comments**

A number of commenters commented on the existing practices of DCMs. CME, ICE, and Better Markets asserted that the Risk Principles are redundant of existing regulations.[242] In particular, CME commented that the Risk Principles overlap with existing Commission regulations, specifically regulations promulgated under Core Principles 2 and 4.[243] CME and ICE suggested relying on or amending existing regulations, specifically Commission regulation §

[242] CME NPRM Letter, at 12-13; ICE NPRM Letter, at 3; Better Markets NPRM Letter, at 4-9.
[243] CME NPRM Letter, at 7, 12-13.

38.255.[244] ICE stated that this would track the Commission's approach to regulating financial risk controls in Commission regulation § 38.607, which has proven effective.[245] ICE also stated that the DCMs could face confusion and potential costs while determining an appropriate notification standard and updating existing regulations could help with these costs.[246]

CME, CEWG, FIA/FIA PTG, ICE, and MFA commented that DCMs already implement controls and address risks to their platforms.[247] MFA believes the Risk Principles will help encourage DCMs to continue to monitor risks as they evolve along with the markets, and to make reasonable modifications as appropriate.[248]

AFR and Rutkowski disagreed with the assertion that current DCM practices are effective in achieving what the Risk Principles aim to achieve.[249]

CME had two direct comments regarding the cost estimates presented in the NPRM. First, CME commented that the Commission should identify the specific types of software enhancements and additional data fields associated with the 2,520 staff hours included in the proposed rulemaking.[250] Second, CME commented that the Commission's estimate of 50 significant market disruptions described in the PRA section of the NPRM is too high, and added that CME determined it had only three significant market disruptions in the last decade across four DCMs based on the number of formal disciplinary cases brought by the DCM for electronic trading activity that may have disrupted markets or other participants.[251]

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[244] *See id.* at 12; ICE NPRM Letter, at 3.
[245] *See id.*
[246] ICE NPRM Letter, at 9.
[247] CME NPRM Letter, at 4-7; CEWG NPRM Letter, at 4; FIA/FIA PTG NPRM Letter, at 3; ICE NPRM Letter, at 1; MFA NPRM Letter, at 2.
[248] MFA NPRM Letter, at 2.
[249] AFR NPRM Letter, at 2; Rutkowski NPRM Letter, at 2.
[250] CME NPRM Letter, at 17.
[251] *See id*.

The Commission did not receive comments on other costs associated with adjusting existing practices, such as costs associated with recordkeeping or with the need for an additional compliance officer.

**ii. Discussion**

The Commission acknowledges the Risk Principles supplement existing regulations, namely Commission regulations §§ 38.251 and 38.255, with some potential overlap. The Commission believes the intended goals of the Risk Principles cannot be solely achieved by adding the words "electronic trading" to existing regulations. To the extent that the Risk Principles are already covered by existing regulations as many commenters suggested, then the Commission does not expect much, if any, additional costs to be associated with the Risk Principles. While the Commission acknowledges that DCMs could face potential costs while determining an appropriate notification standard, the Commission expects DCMs to be already collecting most, if not all, required information to make such a determination. As a result, the Commission expects such costs to be minimal. Some commenters also disagreed with the assumption that existing DCM practices are effective in achieving what the Risk Principles aim to achieve. To the extent this might be the case, the Commission believes DCMs will accordingly experience some additional costs related to the regulations, but the risks associated with market disruptions or system anomalies associated with electronic trading will decrease in financial markets. The Commission expects the Risk Principles will minimize the risks associated with market disruptions or system anomalies associated with electronic trading to a greater degree than the existing regulations, while at the same time minimizing the additional cost burdens of implementation due to the existence of current DCM practices that are expected to be consistent with the Risk Principles.

As to CME's comment on requiring more detail with regard to potential software enhancements that might be required, the Commission provides a more detailed breakdown of the 2,520 staff hours below.

In addressing CME's comment on the estimated annual number of significant market disruptions, the Commission believes that CME's use of the number of formal disciplinary cases brought in connection with electronic trading that may have disrupted markets or other market participants as a "proxy" for significant market disruptions may underestimate the actual number of significant market disruptions. More specifically, while CME states that it has brought approximately 59 disciplinary actions for potential market disruptions involving electronic trading activity since 2011, CME identified just three of these cases to have potentially caused a significant market disruption.[252] However, CME does not provide any information or analysis on how it arrived at its estimate of three significant market disruptions. The Commission notes that each DCM may interpret "significant" disruption in a different manner based on differences in market structures, market participants, and the technology utilized by the DCM. As stated above, the Commission believes that the number of relevant disciplinary cases brought by a DCM could be under-inclusive of the number of potential reportable market disruption events and may not be an appropriate proxy for the number of market disruptions reportable under Commission regulation § 38.251(g). However, the Commission also acknowledges that, based on CME's comment and further consideration, the Commission's original estimate of 50 annual significant market disruptions per DCM might be too high. Accordingly, the Commission has updated its

[252] *See id*. at 9.

estimate of the annual number of reportable market disruption events to be 25 or less (between 0-25) for each DCM as described below.[253]

**iii. Costs**

Consistent with the NPRM and comments received, current risk management practices of some DCMs may be sufficient to comply with the requirements of Commission regulations §§ 38.251(e) through 38.251(g), in which case expected costs are expected to be minimal.[254] However, some DCMs may have to adjust some of their existing practices to comply with the regulations.

The Commission believes that DCMs may have to update their software to enable them to capture more efficiently additional information regarding participants subject to their jurisdiction to implement rules adopted pursuant to Commission regulation § 38.251(e). The Commission acknowledges that the additional information required to be collected may be different for each DCM because the specific rules each DCM might need to adopt and implement pursuant to Commission regulation § 38.251(e) will be different, and also because the existing information collection protocols already in place at each DCM are not likely to be the same. The Commission expects, among other things, the required information to be collected include the trader identification for order entry, the means by which traders connect to the exchange's platform, or any required statistics of order message traffic attributable to an electronic trader.

The Commission expects the design, development, testing, and production release of a required software update to take 2,520 staff hours in total. The Commission expects 360 hours of that total to be used for establishing requirements and design, 1,280 hours to be used for development, 720 hours for testing, and 160 hours for production release. To calculate the cost

[253] *See id*.
[254] *See* NPRM at 42772; CME NPRM Letter, at 17; ICE NPRM Letter, at 9.

estimate for changes to DCM software, the Commission estimates the appropriate wage rate based on salary information for the securities industry compiled by the Department of Labor's Bureau of Labor Statistics ("BLS").[255] Commission staff arrived at an hourly rate of $70.76 using figures from a weighted average of salaries and bonuses across different professions contained in the most recent BLS Occupational Employment and Wages Report (May 2019), multiplied by 1.3 to account for overhead and other benefits.[256] Commission staff chose this methodology to account for the variance in skillsets that may be used to plan, implement, and manage the required changes to DCM software. Using these estimates, the Commission would expect the software update to cost $178,313 per DCM. The Commission acknowledges that this is an estimate and the actual cost of such a software update would depend on the current status of the specific DCM's information acquisition capabilities and the amount of additional information the DCM would have to collect as a result of Commission regulation § 38.251(e). To the extent that a DCM currently or partially captures the required information and data through its systems and technology, these costs would be lower.

The Commission acknowledges that any additional rules resulting from Commission regulation § 38.251(e) are required to be submitted pursuant to part 40. The Commission expects a DCM to take an additional 48 hours annually (two submissions on average per year, 24 hours per submission) to submit these amendments to the Commission. In order to estimate the

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[255] May 2019 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 523000 - Securities, Commodity Contracts, and Other Financial Investments and Related Activities, *available at* https://www.bls.gov/oes/current/naics4_523000.htm.

[256] The Commission's estimated appropriate wage rate is a weighted national average of mean hourly wages for the following occupations (and their relative weight): "computer programmer – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); "project management specialists and business operations specialists – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); "Software and Web Developers, Programmers, and Testers – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); and "Software Developers and Software Quality Assurance Analysts and Testers – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent).

appropriate wage rate, the Commission used the salary information for the securities industry compiled by the BLS.[257] Commission staff arrived at an hourly rate of $89.89 using figures from a weighted average of salaries and bonuses across different professions contained in the most recent BLS Occupational Employment and Wages Report (May 2019) multiplied by 1.3 to account for overhead and other benefits.[258] The Commission estimates this indirect cost to each DCM to be $4,314.72 annually (48 x $89.89). To the extent a DCM currently has in place rules required under Commission regulation § 38.251(e), these costs would be incrementally lower.

The Commission can envision a scenario where a DCM might also need to update its trading systems to subject all electronic orders to exchange-based pre-trade risk controls to prevent, detect, and mitigate market disruptions or system anomalies as required by Commission regulation § 38.251(f). Depending on the extent of the update required, the Commission anticipates the design, development, testing, and production release of the new trading system to take 8,480 staff hours in total, which the Commission expects to be covered by more than one employee. To calculate the cost estimate for updating a DCM's trading systems, the Commission estimates the appropriate wage rate based on salary information for the securities industry compiled by the BLS.[259] Commission staff arrived at an hourly rate of $70.76 using figures from a weighted average of salaries and bonuses across different professions contained in the most recent BLS Occupational Employment and Wages Report (May 2019) multiplied by 1.3 to

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[257] May 2019 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 523000 - Securities, Commodity Contracts, and Other Financial Investments and Related Activities, *available at* https://www.bls.gov/oes/current/naics4_523000.htm.

[258] The Commission's estimated appropriate wage rate is a weighted national average of mean hourly wages for the following occupations (and their relative weight): "compliance officer – industry: securities, commodity contracts, and other financial investment and related activities" (50 percent); and "lawyer – legal services" (50 percent). Commission staff chose this methodology to account for the variance in skill sets that may be used to accomplish the collection of information.

[259] May 2019 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 523000 - Securities, Commodity Contracts, and Other Financial Investments and Related Activities, *available at* https://www.bls.gov/oes/current/naics4_523000.htm.

account for overhead and other benefits.[260] Commission staff chose this methodology to account for the variance in skill sets that may be used to plan, implement, and manage the required update to a DCM's trading system. Using these estimates, the Commission would expect the trading system update to cost $600,036 to a DCM. The Commission emphasizes that this is an estimate and the actual cost could be higher or lower. The cost may also vary across DCMs, as each DCM has the flexibility to apply the specific controls that the DCM deems reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies. In addition, the Commission further notes that to the extent a DCM currently or partially has in place pre-trade risk controls consistent with proposed Commission regulation § 38.251(f), these costs would be incrementally lower.

Commission regulation § 38.251(g) requires a DCM promptly to notify Commission staff of a significant market disruption on its electronic trading platform(s) and provide timely information on the causes and remediation. The Commission expects that there may be incremental costs to DCMs from Commission regulation § 38.251(g) in the form of analysis regarding which disruptions could be significant enough to report, maintain, and archive the relevant data, as well as the costs associated with the act of reporting the disruptions. The Commission currently expects every DCM to have the necessary means to communicate with the Commission promptly, and therefore, does not expect any additional communication costs. The Commission expects DCMs to incur a minimal cost in determining what a significant market

[260] The Commission's estimated appropriate wage rate is a weighted national average of mean hourly wages for the following occupations (and their relative weight): "computer programmer – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); "project management specialists and business operations specialists – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); "Software and Web Developers, Programmers, and Testers – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); and "Software Developers and Software Quality Assurance Analysts and Testers – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent).

disruption could be and preparing information on its causes and remediation. The Commission does not expect this cost to be significant, because the Commission believes DCMs should already have the means necessary to identify the causes of market disruptions and have plans for remediation. To the extent that complying with Commission regulation § 38.251(g) requires a DCM to incur additional recordkeeping and reporting burdens, the Commission estimates these additional recordkeeping requirements to be no more than 50 hours per DCM per year, and the additional reporting requirements to require no more than 125 hours per DCM per year (five hours per report and an estimated 25 reports additionally per DCM).

The Commission acknowledges CME's comment indicating that based on its review and analysis, CME believes to have had only three significant market disruptions in the past decade across its four DCMs. The Commission appreciates the information provided and recognizes that the number of times a DCM might have to identify and report significant market disruptions pursuant to Commission regulation § 38.251(g) may vary greatly across DCMs. The Commission acknowledges that the frequency of such reporting could theoretically be less than one in any given year for an exchange.

In calculating the cost estimates for recordkeeping and reporting, the Commission estimates the appropriate wage rate based on salary information for the securities industry compiled by the BLS.[261] For the reporting cost, Commission staff arrived at an hourly rate of $76.44 using figures from a weighted average of salaries and bonuses across different professions contained in the most recent BLS Occupational Employment and Wages Report

[261] May 2019 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 523000 - Securities, Commodity Contracts, and Other Financial Investments and Related Activities, *available at* https://www.bls.gov/oes/current/naics4_523000.htm.

(May 2019) multiplied by 1.3 to account for overhead and other benefits.[262] In calculating the cost estimate for recordkeeping, the Commission staff arrived at an hourly rate of $71.019 using figures from the most recent BLS Occupational Employment and Wages Report (May 2019) multiplied by 1.3 to account for overhead and other benefits.[263] The Commission estimates the cost for additional recordkeeping to a DCM to be no more than $3,550.95 (50 x $71.019) annually and the cost for additional reporting to a DCM to be no more than $9,555.00 (125 x $76.44) annually. As discussed above, certain DCMs might have no additional relevant market disruptions to report some years, which would translate to a zero cost estimate of additional reporting and recordkeeping for those years for those DCMs.

To the extent that DCMs would need to update their rules and internal processes to comply with Commission regulations §§ 38.251(e) through 38.251(g) and the associated Acceptable Practices, the Commission expects some DCMs also may need to update or supplement their compliance programs, which would involve additional costs. However, the Commission does not expect these costs to be significant. The Commission believes some DCMs may need to hire an additional full-time compliance staff member to address the additional compliance needs associated with the regulation. Assuming that the average annual salary of each compliance officer is $94,705, the Commission estimates the incremental annual

[262] The Commission's estimated appropriate wage rate is a weighted national average of mean hourly wages for the following occupations (and their relative weight): "computer programmer – industry: securities, commodity contracts, and other financial investment and related activities" (25 percent); "compliance officer – industry: securities, commodity contracts, and other financial investment and related activities" (50 percent); and "lawyer – legal services" (25 percent). Commission staff chose this methodology to account for the variance in skill sets that may be used to accomplish the required reporting.
[263] The Commission's estimated appropriate wage rate is the mean hourly wages for "database administrators and architects." Commission staff chose this methodology to account for the variance in skill sets that may be used to accomplish the collection of information.

compliance costs to a DCM that needs to hire an additional compliance officer to be $119,340.[264] However, the Commission notes that the exact compliance needs may vary across DCMs, and some DCMs may already have adequate compliance programs that can handle any rule updates and internal processes required to comply with Commission regulations §§ 38.251(e) through 38.251(g), and therefore the actual compliance costs may be higher or lower than the Commission's estimates.

**b. Cost of Periodically Updating Risk Management Practices**

**i. Summary of Comments**

The Commission did not receive any comments associated with the need periodically to update risk management practices.

**ii. Costs**

The Commission expects the trading methods and technologies of market participants to change over time, requiring DCMs to adjust their rules pursuant to Commission regulation § 38.251(e) and adjust their exchange-based pre-trade risk controls pursuant to Commission regulation § 38.251(f) accordingly. As trading methodologies and connectivity measures evolve, it is expected that new causes of potential market disruptions and system anomalies could surface. To that end, the Commission believes full compliance would require a DCM to implement periodic evaluation of its entire electronic trading marketplace and updates of the exchange-based pre-trade risk controls to prevent, detect, and mitigate market disruptions or system anomalies, as well as updates of the appropriate definitions of market disruptions and

[264] In calculating this cost estimate for reporting, the Commission estimates the appropriate annual wage for a compliance officer based on salary information for the securities industry compiled by the BLS. Commission staff used the annual wage of $91,800, which reflects the average annual salary for a compliance officer contained in the most recent BLS Occupational Employment and Wages Report (May 2019), and multiplied it by 1.3 to account for overhead and other benefits.

system anomalies. Therefore, rules imposed as a result of Commission regulations §§ 38.251(e) through 38.251(g) would need to be flexible and fluid, and potentially updated as needed, which may involve additional costs. Moreover, such rule changes would result in a cost increase associated with the rise in the number of rule filings that DCMs would have to prepare and submit to the Commission.

**c. Costs to Market Participants**

**i. Summary of Comments**

The Commission did not receive any comments associated with costs to market participants.

**ii. Costs**

The Commission can envision a situation where the rules adopted by DCMs as a result of Commission regulation § 38.251(e) change frequently, and market participants would need to adjust to new rules frequently. While these adjustments might carry some costs for market participants, such as potential added delays to their trading activity due to additional pre-trade controls, the Commission expects these changes to be communicated to the market participants by DCMs with enough implementation time so as to minimize the burden on market participants and their trading strategies. Moreover, to the extent a DCM's policies and procedures require market participants to report changes to their connection processes, trading strategies, or any other adjustments the DCM deems required, there could be some cost to the market participants. Finally, market participants may feel the need to upgrade their risk management practices as a response to DCMs' updated risk management practices driven by the Risk Principles. The Commission recognizes that part of the costs to market participants might also come from needing to update their systems and potentially adjust the software they use for risk management, trading, and reporting. These costs may be somewhat mitigated to the extent market participants currently comply with DCM rules and regulations regarding pre-trade risk controls and market disruption protocols.

**d. Regulatory Arbitrage**

**i. Summary of Comments**

The Commission received a number of comments regarding the possibility of competition and regulatory arbitrage. CME commented that the greatest risk for regulatory arbitrage is between DCMs and SEFs or FBOTs.[265] Also, IATP commented that the Commission should clarify why it considers regulatory arbitrage between DCMs unlikely to happen.[266] IATP also noted that the competition among DCMs for over-the-counter trading and for trading in new products, such as digital coins, could result in lax risk control design or lax updating of controls under competitive pressures.[267] IATP also mentioned the difference in competitive pressures for cleared and uncleared trades.[268] Finally, CFE expressed concern that if the Commission compares all DCMs to a baseline of controls, which are prevalent across DCMs, there may be an expectation for smaller DCMs to adhere to the risk control standards of larger DCMs.[269] This could become a barrier to entry for smaller DCMs.[270]

**ii. Discussion**

As outlined the in the NPRM and in the discussion of antitrust considerations below,[271] the Commission acknowledges the theoretical possibility of regulatory arbitrage occurring as a

[265] CME NPRM Letter, at 13.
[266] IATP NPRM Letter, at 11.
[267] *See id.* at 9.
[268] *See id.* at 10.
[269] CFE NPRM Letter, at 4.
[270] *See id.*
[271] *See* Section III.D of this final rulemaking.

result of the Risk Principles but does not expect it to materialize.[272] As discussed in the NPRM and Section I.D.2 of this final rulemaking, the Commission will continue to monitor whether Risk Principles of this nature may be appropriate for other markets such as SEFs or FBOTs.[273]

The Commission acknowledges there are differences in products and market participants across DCMs, and DCMs might implement different rules and risk controls given differences in their respective markets. It is important to note that ongoing Commission oversight will identify whether the differences in DCM rules and risk controls are due to differing contracts being offered for trading, competitive pressure, or regulatory arbitrage, and whether there are resulting issues that must be addressed.

**iii. Costs**

The principles-based regulations offer DCMs the flexibility to address market disruptions and system anomalies as they relate to their particular markets and market participants' trading activities. Similarly, DCMs are also given the flexibility to decide how to apply the requirements associated with regulations in their respective markets. This flexibility could result in differences across DCMs, potentially contributing to regulatory arbitrage. For example, DCMs' practices could differ in the information collected from market participants; the rules applied to prevent, detect, and mitigate market disruptions or system anomalies; and the intensity of pre-trade controls. The parameters for establishing market disruptions or system anomalies could be defined differently by the various DCMs, which might lead to differing levels of exchange-based pre-trade risk controls.

The Commission acknowledges that to the extent there is potential for market participants to choose between DCMs, those DCMs with lower information collection requirements and

[272] *See* NPRM at 42763 n.6.
[273] *See id.* and Section I.D.2 of this final rulemaking.

potentially less stringent pre-trade risk controls could appear more attractive to certain market participants. All or some of these factors could create the potential for market participants to move their trading from DCMs with potentially more stringent risk controls to DCMs with less stringent controls, which could cost certain DCMs business. While the Commission recognizes that this kind of regulatory arbitrage could cause liquidity to move from one DCM to another, potentially impairing (or benefiting) the price discovery of the contract with reduced (or increased) liquidity, the Commission does not expect this to occur with any frequency. First, the Commission notes that liquidity for a given contract in futures markets tends to concentrate in one DCM. This means that futures markets are less susceptible to this type of regulatory arbitrage. Second, while an individual DCM decides the exchange-based pre-trade risk controls for its markets, those risk controls must be effective. The Commission does not believe that differences in the application of the Risk Principles across DCMs would be substantial enough to induce market participants to switch to trading at a different DCM, even if there were two DCMs trading similar enough contracts. For example, DCMs currently apply various pre-trade controls to comply with Commission regulation § 38.255 requirements for risk controls for trading, but the Commission does not have any evidence that DCMs compete on pre-trade controls. The Commission expects DCMs to approach the setting of their rules and controls to comply with the Risk Principles in a similar manner.

### 3. Benefits

#### a. Minimize Disruptive Behaviors Associated with Electronic Trading and Ensure Sound Financial Markets

##### i. Summary of Comments

While not a direct comment, AFR stated that the NPRM does not offer a systematic assessment of the current costs of the types of electronic disruptions addressed by the Risk Principles.[274]

**ii. Discussion**

The Commission acknowledges that no such costs were present in the NPRM and it considers such analysis not quantitatively feasible. However, the Commission considers market disruption costs to be substantial and the Commission expects that these regulations will minimize the frequency of market disruptions and their associated costs. The Commission believes this to be an important benefit to DCMs and market participants through ensuring a sound financial marketplace.

**iii. Benefits**

The Commission believes that the Risk Principles are crucial for the integrity and resilience of financial markets, as they would ensure that DCMs have the ability to prevent, detect, and mitigate most, if not all, disruptive behaviors associated with electronic trading. Commission regulation § 38.251(e) requires DCMs to adopt and implement rules governing market participants subject to their jurisdiction such that market disruptions or system anomalies associated with electronic trading can be minimized. This would allow markets to operate smoothly and to continue functioning as efficient platforms for risk transfer, as well as allowing for healthy price discovery.

The Commission expects Commission regulation § 38.251(f) to subject all electronic orders to a DCM's exchange-based pre-trade risk controls. The Commission expects this to benefit the markets as well as the market participants sending orders to the DCMs. First, by

[274] AFR NPRM Letter, at 2.

preventing orders that could cause market disruptions or system anomalies through exchange-based pre-trade risk controls, Commission regulation § 38.251(f) allows the markets to operate orderly and efficiently. This benefits traders in the markets, market participants utilizing price discovery in the markets, as well as traders in related markets. Second, Commission regulation § 38.251(f) provides market participants sending orders to a DCM with an additional layer of protection through the implementation of exchange-based pre-trade risk controls. If an unintentional set of messages were to breach the risk controls of FCMs and other market participants, Commission regulation § 38.251(f) could prevent those messages from reaching a DCM and potentially resulting in unwanted transactions. This benefits the market participants, as well as their FCMs, by saving them from the obligation of unwanted and unintended transactions.

Commission regulation § 38.251(g) ensures that significant market disruptions will be communicated to the Commission staff promptly, as well as their causes and eventual remediation. The Commission believes Commission regulation § 38.251(g) will benefit the markets and market participants by strengthening their financial soundness and promoting the resiliency of derivatives markets by allowing the Commission to stay informed of any potential market disruptions effectively and promptly. If needed, the Commission's timely action in the face of market disruptions could help markets recover faster and stronger.

Finally, Commission regulations §§ 38.251(e) through 38.251(g) are likely to benefit the public by promoting sound risk management practices across market participants and preserving the financial integrity of markets so that markets can continue to fulfill their price discovery role.

**b. Value of Flexibility Across DCMs**

**i. Summary of Comments**

Most commenters, including CME, CFE, CEWG, FIA/FIA PTG, ICE, ISDA/SIFMA, MFA, and Optiver supported a principles-based approach, which allows flexibility in the implementation of the regulations across DCMs.[275] Many commenters noted they prefer the principles-based approach to the prescriptive nature of prior proposals and that such an approach provides flexibility and takes into account future technological advances.[276]

In contrast, AFR, Better Markets, IATP, and Rutkowski disagreed with the principles-based approach, and asserted that the incentives of DCMs and public regulators are not fully aligned.[277] AFR, Better Markets, and Rutkowski commented that the Risk Principles provide too much deference to DCMs and the Commission failed to address conflicts of interest concerns that may impede the independence of DCMs and SROs.[278]

**ii. Discussion**

The Commission believes a principles-based approach of Risk Principles allows flexibility to DCMs. Through this flexible approach, DCMs can shape the adoption and implementation of their rules to effectively prevent, detect, and mitigate risks associated with electronic trading in their markets. Additionally, this flexibility will also allow DCMs to adjust their rules accordingly to respond to future changes in their markets. Without such flexibility, DCMs would need to comply with prescriptive rules that may not be as effective in preventing, detecting, and mitigating market disruptions and system anomalies and that may involve higher costs to market participants as well as potential higher compliance costs.

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[275] CME NPRM Letter, at 1, 12, 16; CFE NPRM Letter, at 1; CEWG NPRM Letter, at 2; FIA/FIA PTG NPRM Letter, at 2-4; ICE NPRM Letter, at 2, 9; ISDA/SIFMA NPRM Letter, at 1-2; MFA NPRM Letter, at 1-2; Optiver NPRM Letter, at 1.

[276] CME NPRM Letter, at 1, 12; CFE NPRM Letter, at 1; CEWG NPRM Letter, at 2; FIA/FIA PTG NPRM Letter, at 2-4; ISDA/SIFMA NPRM Letter, at 1; MFA NPRM Letter, at 1-2.

[277] AFR NPRM Letter, at 1-2; Better Markets NPRM Letter, at 2, 6, 9, 10-12; IATP NPRM Letter, at 1, 4, 8; Rutkowski NPRM Letter, at 1.

[278] AFR NPRM Letter, at 1-2; Better Markets NPRM Letter, at 2, 6, 9, 10-12; Rutkowski NPRM Letter, at 1.

The Commission notes Core Principle 16 in part 38 requires DCMs to establish and enforce rules addressing potential conflicts of interest.[279] Furthermore, as also mentioned in the preamble, any conflict of interest concerns, where DCMs might prioritize profitability over reasonable controls, will be addressed through regular Commission oversight of DCMs.[280]

**iii. Benefits**

The Commission believes that DCMs have markets with different trading structures and participants with varying trading patterns. It is possible that market participant behavior that one DCM considers a major risk of market disruptions could be of less concern to another DCM. The Commission's principles-based approach to Commission regulations §§ 38.251(e) and 38.251(f) allows DCMs the flexibility to impose the most efficient and effective rules and pre-trade risk controls for their respective markets. The Commission believes such flexibility, including through the Acceptable Practices, benefits DCMs by allowing them to adopt and implement effective and efficient measures reasonably designed to achieve the objectives of the Risk Principles. Without such flexibility, DCMs would need to comply with prescriptive rules that may not be as effective in preventing, detecting and mitigating market disruptions and system anomalies and that may potentially involve higher compliance costs.

**c. Direct Benefits to Market Participants**

**i. Summary of Comments**

The Commission did not receive any comments associated with benefits to market participants.

**ii. Benefits**

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[279] *See* 17 CFR 38.850-51.

[280] Conflicts of interest are also discussed in the antitrust considerations section of this final rule. *See* Section III.D below.

Commission regulation § 38.251(e) requires DCMs to adopt and implement rules that are reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. In addition, Commission regulation § 38.251(f) requires DCMs to subject all electronic orders to exchange-based pre-trade risk controls that are reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. This approach will assist in preventing, detecting, and mitigating market disruptions and system anomalies and thus protect the effectiveness of financial markets to continue providing the services of risk transfer and price transparency to all market participants. Moreover, the Commission believes that requiring DCMs to implement these DCM-based rules and risk controls could incentivize market participants themselves to strengthen their own risk management practices.

**d. Facilitate Commission Oversight**

**i. Summary of Comments**

The Commission did not receive any comments associated with benefits to Commission oversight.

**ii. Benefits**

The Commission believes the implementation of the Risk Principles will facilitate the Commission's capability to monitor the markets effectively. Moreover, Commission regulation § 38.251(g) will result in DCMs informing the Commission promptly of any significant market disruptions and remediation plans. The Commission believes this will allow it to take steps to contain a disruption and prevent the disruption from impacting other markets or market participants. Thus, the Risk Principles will facilitate the Commission's oversight and its ability to monitor and assess market disruptions across all DCMs.

Finally, the Commission expects that the Risk Principles will better incentivize DCMs to recognize market disruptions and system anomalies and examine remediation plans in a timely fashion.

**4. 15(a) Factors:**

**a. Protection of Market Participants and the Public**

Commission regulations §§ 38.251(e) through 38.251(g) are intended to protect market participants and the public from potential market disruptions due to electronic trading. The rules are expected to benefit market participants and the public by requiring DCMs to adopt and implement rules addressing the market disruptions and system anomalies associated with electronic trading, subject all electronic orders to specifically-designed exchange-based pre-trade risk controls, and promptly report the causes and remediation of significant market disruptions. All of these measures create a safer marketplace for market participants to continue trading without major interruptions and allow the public to benefit from the information generated through a well-functioning marketplace.

**b. Efficiency, Competitiveness, and Financial Integrity of DCMs**

The Commission believes that Commission regulations §§ 38.251(e) through 38.251(g) will enhance the financial integrity of DCMs by requiring DCMs to implement rules and risk controls to address market disruptions and system anomalies associated with electronic trading. However, the Commission also acknowledges that market participants' efficiency of trading might be hindered due to potential latencies that may occur in the delivery and routing of orders to the matching engine as a result of additional pre-trade risk controls. In addition, the Commission can envision a scenario where the flexibility provided to DCMs in designing and implementing rules to prevent, detect, and mitigate market disruptions and system anomalies, and the differences between the updated pre-trade risk controls and existing DCM risk control rules, could potentially lead to regulatory arbitrage between DCMs. To the extent that there are significant differences in those practices set by competing DCMs, market participants might choose to trade in the DCM with the least stringent rules if competing DCMs offer the same or relatively similar products. The Commission acknowledges that competitiveness across DCMs might be hurt as a result. However, as discussed above, the Commission does not believe that differences in the application of the Risk Principles across DCMs would be substantial enough to induce market participants to switch to trading at a different DCM, even if there were two DCMs trading similar enough contracts.

**c. Price discovery**

The Commission expects price discovery to improve as a result of Commission regulations §§ 38.251(e) through 38.251(g), especially due to improved market functioning through the implementation of targeted pre-trade risk controls and rules. The Commission expects the new regulations to assist with the prevention and mitigation of market disruptions due to electronic trading, leading markets to provide more stable and consistent price discovery services. However, as noted above, adoption and implementation of rules pursuant to Commission regulation § 38.251(e) and pre-trade risk controls implemented by DCMs pursuant to Commission regulation § 38.251(f) could be different across DCMs. As a result, the improvements in price discovery across DCMs' markets are not likely to be uniform.

**d. Sound Risk Management Practices**

The Commission expects Commission regulations §§ 38.251(e) through 38.251(g) to help promote and ensure better risk management practices of both DCMs and their market participants. The Commission expects DCMs and market participants to focus on, and potentially update, their risk management practices. Additionally, the Commission believes that the requirement for DCMs to notify Commission staff regarding the cause of a significant market disruption to their respective electronic trading platforms would also provide reputational incentives for both DCMs and their market participants to focus on, and improve, risk management practices.

**e. Other Public Interest Considerations**

The Commission does not expect Commission regulations §§ 38.251(e) through 38.251(g) to have any significant costs or benefits associated with any other public interests.

**D. Antitrust Considerations**

Section 15(b) of the CEA requires the Commission to "take into consideration the public interest to be protected by the antitrust laws and endeavor to take the least anticompetitive means of achieving the purposes of this Act, in issuing any order or adopting any Commission rule or regulation (including any exemption under section 4(c) or 4c(b)), or in requiring or approving any bylaw, rule, or regulation of a contract market or registered futures association established pursuant to section 17 of this Act."[281] The Commission believes that the public interest to be protected by the antitrust laws is generally to protect competition. In the NPRM, the Commission preliminarily determined that the Risk Principles proposal is not anticompetitive and has no anticompetitive effects. The Commission then requested comment on (i) whether the proposal is anticompetitive and, if so, what the anticompetitive effects are; (ii) whether any other specific public interest, other than the protection of competition, to be protected by the antitrust laws is implicated by the proposal; and (iii) whether there are less anticompetitive means of achieving the relevant purposes of the CEA that would otherwise be served by adopting the proposal.

[281] 7 U.S.C. § 19(b).

The Commission does not anticipate that the Risk Principles rulemaking will result in anticompetitive behavior, but instead, believes that the principles-based approach to DCM electronic trading does not establish a barrier to entry or a competitive restraint. As noted above, the Commission encouraged comments from the public on any aspect of the proposal that may have the potential to be inconsistent with the antitrust laws or anticompetitive in nature. The Commission received three comments asserting that the proposed rules may potentially impact competition through the existence of "regulatory arbitrage" and one comment regarding the competitive impact of potential risk control assessments to a baseline of risk controls that are prevalent and effective across DCMs.

IATP commented that "DCMs compete for market participant trades, so competitive pressures could reduce DCM verification of market participant compliance with DCM requirements for market participant risk control."[282] IATP focused on the potential competitive pressures that could potentially occur with respect to non-cleared transactions, stating that these transactions should "post higher initial margin and maintain higher variation margin than cleared trades."[283] IATP disagreed with the Commission's belief in the NPRM that a lack of uniformity between DCMs' rules and risk controls does not render a particular DCM's rules or risk controls per se unreasonable.[284]

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[282] IATP NPRM Letter, at 9. IATP noted, among other things, that "trading in new products, such as digital coins, could result in lax risk control design or lax updating of controls under competitive pressures."

[283] *Id.*

[284] *See* NPRM at 42765. IATP commented that "If one DCM pursues competitive advantage by developing risk controls and rules that market participants perceive to be less costly to implement and/or to give them a competitive advantage in trading, the Commission believes the DCM seeking such a competitive advantage to comply with the Principles, provided that the DCM rules and risk controls are not inherently unreasonable." IATP NPRM Letter, at 11. IATP believes that, in connection with its comments regarding the potential competitive concerns of the Electronic Risk Principles Rule, the Commission should document and explain how "allowing each DCM to develop and enforce its own rules and risk controls presents no possibility of regulatory arbitrage among DCMs." *See id.*

AFR commented that the Commission's proposal rejected the more active regulatory approach to electronic trading taken in the now-withdrawn Regulation AT and, instead, delegates the core elements of electronic trading oversight to for-profit exchanges under a principles-based approach.[285] AFR criticized the Commission's principles-based approach regarding the regulation of electronic trading on DCMs, stating that it disagrees with the core assumption underlying the principles-based approach that the incentives of DCMs "are fully aligned with those of public regulators in limiting speculative and trading practices that could threaten market integrity."[286] The basis of AFR's comment is that DCMs are "economically dependent on the order flow provided by large traders and are in direct competition with other venues to capture that order flow."[287] As a result, AFR argues that this dependence on order flow creates a conflict of interest whereby DCMs may accommodate the interests of large brokers and traders even though there may be risks to market integrity. AFR further believes that conflict of interest requires significant public regulatory oversight of DCM market practices, stating that "[p]ure self-regulation is not enough."[288]

Better Markets similarly commented that permitting DCMs to determine the types of risk controls to deter and/or prevent market disruptions is inherently conflicted due to competitive pressures.[289] In commenting regarding the potential competitive issues in connection with the

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[285] *See* AFR NPRM Letter, at 1. *See also* Rutkowski NPRM Letter, at 1. Mr. Rutkowski's comment largely adopts the arguments set forth in the AFR comment.

[286] *See* AFR NPRM Letter, at 1.

[287] *Id.*

[288] *Id.*

[289] *See* Better Markets NPRM Letter, at 11. In particular, Better Markets noted that "[e]xchanges face conflicts of interest between maximizing profit and shareholder value and diminishing trading volumes through meaningful limits on certain electronic trading practices. With competitive pressures and revenues at stake, one exchange is unlikely to be a first mover and absorb the costs and rancor of market participants in implementing risk controls and related measures that its competitors may, for market share reasons, postpone indefinitely. That is why a federal baseline set of controls and regulations—revisited as often as is necessary to ensure responsible innovation—must be applied to all DCMs." *Id.*

Risk Principles, Better Markets cited the Commission's statement in the NPRM that noted the potential for regulatory arbitrage due to the principles-based nature of the requirements.[290] With respect to this competitive issue, Better Markets noted that those DCMs with lower information collection requirements and less stringent pre-trade risk controls could appear more attractive to certain market participants and could facilitate certain market participants to move trading among DCMs, thereby costing certain DCMs business.[291]

As noted in the NPRM and the preamble of these final rules, the Commission is aware that DCMs may have conflicting and competing interests in connection with the oversight of electronic trading.[292] However, the Commission does not believe that differences in the application of the Risk Principles across DCMs would be substantial enough to induce market participants to switch to trading at a different DCM.

The commenters essentially argued that the more prescriptive regulatory approach to electronic trading taken in the withdrawn Regulation AT proposal is preferable to the Risk Principles approach that "delegates" elements of electronic trading oversight to for-profit exchanges. As support for their argument, commenters focused on the inherent conflict of self-regulation whereby a for-profit entity is also tasked with performing a certain degree of regulatory oversight over its marketplace. The Commission notes the Congressional intent to serve the public interests of the CEA "through a system of effective self-regulation of trading facilities . . . under the oversight of the Commission."[293] DCMs have significant incentives and

[290] Better Markets specifically stated that "The CFTC acknowledges this regulatory arbitrage concern but minimizes such concerns due to a belief that "differences in the application of the proposed regulation across DCMs would [not] be substantial enough to induce market participants to switch to trading at a different DCM, even if there were two DCMs trading similar enough contracts." Better Markets NPRM Letter, at 11. *See also* NPRM at 42774.
[291] *See id.*
[292] *See* NPRM at 42775 and Section III.C.4 of this final rulemaking.
[293] Section 3(b) of the CEA. 7 U.S.C. 5(b).

obligations to maintain well-functioning markets as self-regulatory organizations that are subject to specific regulatory requirements. Specifically, the DCM Core Principles require DCMs to, among other things, refrain from adopting any rule or taking any action that results in any unreasonable restraint of trade and imposing material anticompetitive burdens.[294] In addition, DCM Core Principles also require DCMs to surveil trading on their markets to prevent market manipulation, price distortion, and disruptions of the delivery or cash-settlement process.[295] Several academic studies, including one concerning futures exchanges and another concerning demutualized stock exchanges, also support the conclusion that exchanges are able both to satisfy shareholder interests and meet their self-regulatory organization responsibilities.[296]

As noted above in Section III.C.3, CFE expressed concern that smaller DCMs could over time be expected to adopt and implement the same pre-trade risk controls in place at the larger DCMs which could, therefore, impact competition and diversity. CFE is specifically concerned about the statement in the NPRM regarding assessment of risk controls comparing "all DCMs to a baseline of controls on electronic trading and electronic order entry that are prevalent and effective across DCMs."[297] CFE further asserted that "what is in place at the larger DCMs and DCM groups should not simply become the de facto standard for what all DCMs must employ."[298]

The Commission reiterates that the Risk Principles are intended to provide DCMs with the flexibility to adopt those pre-trade risk controls reasonably designed to prevent, detect, and

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[294] CEA § 5(d)(19), 7 U.S.C. § 7(d)(19) and 17 CFR 38.1000.
[295] 17 CFR 38.200 and 17 CFR 38.250.
[296] *See* David Reiffen and Michel A. Robe, *Demutualization and Customer Protection at Self-Regulatory Financial Exchanges*, Journal of Futures Markets, *supra* note 56, at 126-164, Feb. 2011; Kobana Abukari and Isaac Otchere, *Has Stock Exchange Demutualization Improved Market Quality? International Evidence*, *supra* note 56.
[297] NPRM at 42768.
[298] CFE NPRM Letter, at 4.

mitigate market disruptions or system anomalies associated with electronic trading. As a result, the Commission does not intend or expect larger DCM pre-trade risk controls to be the standard for all DCMs, although there may be risk controls that are common to all DCMs. As noted in the CFE comments, it is not the Commission's intent to effectively impose on all DCMs those risk controls that are in place at larger DCMs.

The Commission also believes that these competitive concerns raised by commenters are mitigated because: (i) DCMs are required to submit any proposed rules under Commission regulation § 38.251(e) to the Commission for review under part 40 of the Commission's regulations; and (ii) DCMs are required pursuant to the DCM Antitrust Core Principle to refrain from adopting any rule or taking any action that results in any unreasonable restraint of trade and imposing material anticompetitive burdens.[299] Accordingly, the Commission has determined that the Risk Principles serve the regulatory purpose of the CEA "to deter and prevent price manipulation or any other disruptions to market integrity."[300] In addition, the Commission notes that the Risk Principles implement additional purposes and policies set forth in section 5(d)(4) of the CEA.[301] The Commission has considered the final rules and related comments, to determine whether they are anticompetitive, and continues to believe that the Risk Principles will not result in any unreasonable restraint of trade, or impose any material anticompetitive burden on trading in the markets.

## IV. Rule Text

[299] *See* Commission regulation § 38.1000 (Core Principle 19, Antitrust Considerations).

[300] Section 3(b) of the CEA, 7 U.S.C. 5(b).

[301] 7 U.S.C. 5(d)(4). This DCM Core Principle focusing on the prevention of market disruption requires that "[t]he board of trade shall have the capacity and responsibility to prevent manipulation, price distortion, and disruptions of the delivery or cash-settlement process through market surveillance, compliance, and enforcement practices and procedures, including—(A) methods for conducting real-time monitoring of trading; and (B) comprehensive and accurate trade reconstructions."

**List of Subjects**

17 CFR Part 38

Commodity futures, Designated contract markets, Reporting and recordkeeping requirements.

**PART 38—DESIGNATED CONTRACT MARKETS**

1. The authority citation for part 38 continues to read as follows:

Authority: 7 U.S.C. 1a, 2, 6, 6a, 6c, 6d, 6e, 6f, 6g, 6i, 6j, 6k, 6l, 6m, 6n, 7, 7a-2, 7b, 7b-1, 7b-3, 8, 9, 15, and 21, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111-203, 124 Stat. 1376.

2. In § 38.251, republish introductory text and add paragraphs (e) through (g) to read as follows:

**§ 38.251 General requirements.**

A designated contract market must:

* * * * *

(e) Adopt and implement rules governing market participants subject to its jurisdiction to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading;

(f) Subject all electronic orders to exchange-based pre-trade risk controls to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading; and

(g) Promptly notify Commission staff of any significant market disruptions on its electronic trading platform(s) and provide timely information on the causes and remediation.

3. In Appendix B to Part 38 – Guidance on, and Acceptable Practices In, Compliance with Core Principles, republish existing text and add subparagraph (b)(6) under "Core Principle 4 of section 5(d) of the Act: PREVENTION OF MARKET DISRUPTION."

(6) *Market disruptions and system anomalies associated with electronic trading.* To comply with regulation 38.251(e), the contract market must adopt and implement rules that are reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies associated with electronic trading. To comply with regulation 38.251(f), the contract market must subject all electronic orders to exchange-based pre-trade risk controls that are reasonably designed to prevent, detect, and mitigate market disruptions or system anomalies.