SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 240

[Release No. 34–101446; File No. S7–10–23]

RIN 3235–AN19

Covered Clearing Agency Resilience and Recovery and Orderly Wind-Down Plans

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission (''Commission'') is adopting amendments to certain rules in the Covered Clearing Agency Standards (''CCA Standards'') under the Securities Exchange Act of 1934 (''Exchange Act'') and the Dodd-Frank Wall Street Reform and Consumer Protection Act (''Dodd-Frank Act''). The amendments strengthen existing rules by adding new requirements related to the collection of intraday margin by a covered clearing agency (''CCA'') and the use of substantive inputs in its risk-based margin system. The Commission is also adopting a new rule to establish required elements of a CCA's recovery and orderly wind-down plan (''RWP'').

DATES:

Effective date: January 17, 2025.

Compliance date: The applicable compliance dates are discussed in Part III.

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SUPPLEMENTARY INFORMATION: Pursuant to section 17A of the Exchange Act,[1] as well as the Payment, Clearing, and Settlement Supervision Act (''Clearing Supervision Act'') in Title VIII of the Dodd-Frank Act,[2] the Commission is adopting amendments to 17 CFR 240.17ad–22(e)(6) and adding new § 240.17ad–26. Below is a table of citations to the rules referenced in this release, including all rules being amended or adopted:

Commission reference	CFR citation (17 CFR)
Exchange Act:	
Rule 17Ad–22	§ 240.17ad–22.
Rule 17Ad–22(e)(3)(ii)	§ 240.17ad–22(e)(3)(ii).
Rule 17Ad–22(e)(4)	§ 240.17ad–22(e)(4).
Rule 17Ad–22(e)(6)	§ 240.17ad–22(e)(6).
Rule 17Ad–22(e)(6)(ii)	§ 240.17ad–22(e)(6)(ii).
Rule 17Ad–22(e)(6)(iv)	§ 240.17ad–22(e)(6)(iv).
Rule 17Ad–22(e)(15)	§ 240.17ad–22(e)(15).
Rule 17Ad–22(e)(15)(ii)	§ 240.17ad–22(e)(15)(ii).
Rule 17Ad–22(e)(23)	§ 240.17ad–22(e)(23).
Rule 17Ad–22(e)(23)(i)	§ 240.17ad–22(e)(23)(i).
Rule 17Ad–22(e)(23)(ii)	§ 240.17ad–22(e)(23)(ii).
Rule 17Ad–22(e)(23)(iv)	§ 240.17ad–22(e)(23)(iv).
Rule 17Ad–25	§ 240.17ad–25.
Rule 17Ad–25(c)	§ 240.17ad–25(c).
Rule 17Ad–25(i)	§ 240.17ad–25(i).
Rule 17Ad–25(j)	§ 240.17ad–25(j).
Rule 17Ad–26	§ 240.17ad–26.
Rule 17Ad–26(a)	§ 240.17ad–26(a).
Rule 17Ad–26(a)(1)	§ 240.17ad–26(a)(1).
Rule 17Ad–26(a)(2)	§ 240.17ad–26(a)(2).
Rule 17Ad–26(a)(3)	§ 240.17ad–26(a)(3).
Rule 17Ad–26(a)(4)	§ 240.17ad–26(a)(4).
Rule 17Ad–26(a)(5)	§ 240.17ad–26(a)(5).
Rule 17Ad–26(a)(6)	§ 240.17ad–26(a)(6).
Rule 17Ad–26(a)(7)	§ 240.17ad–26(a)(7).
Rule 17Ad–26(a)(8)	§ 240.17ad–26(a)(8).
Rule 17Ad–26(a)(9)	§ 240.17ad–26(a)(9).
Rule 17Ad–26(b)	§ 240.17ad–26(b).

The amendments to Rule 17Ad–22(e)(6)(ii) establish new requirements with respect to a CCA's policies and procedures regarding the collection of intraday margin, specifically, to (i) include a new requirement to monitor intraday exposures on an ongoing basis, (ii) modify the preexisting reference to making intraday calls ''in defined circumstances'' to making intraday calls ''as frequently as circumstances warrant'' and identifying examples of such circumstances, and (iii) require that a CCA document when it determines not to make an intraday margin call pursuant to its written policies and procedures required under paragraph (e)(6)(ii). The amendments to Rule 17Ad–22(e)(6)(iv) establish new requirements for a CCA relying upon substantive inputs to its risk-based margin model, including when such substantive inputs are not readily available or reliable.

New Rule 17Ad–26 prescribes requirements for the contents of a CCA's RWP. While Rule 17Ad–22(e)(3)(ii) currently requires a CCA's written policies and procedures to include the CCA's RWP, Rule 17Ad–22(e)(3)(ii) did not include requirements for the content of RWPs.[3] New Rule 17Ad–26 identifies elements that a CCA's RWP must contain, including: (i) elements related to planning, including the identification and use of scenarios, triggers, tools, staffing, and service providers, as discussed in Parts II.C.1 through 5; (ii) timing and implementation of the plans,

[1] 15 U.S.C. 78q–1.

[2] 12 U.S.C. 5461 *et seq.*

[3] 17 CFR 240.17ad–22(e)(3)(ii).

as discussed in Parts II.C.6 and 7; and (iii) testing and board approval of the plans, as discussed in Parts II.C.8 and 9. Definitions included in new Rule 17Ad–26 are discussed in Part II.D.

In developing these final rules, Commission staff has consulted with the Financial Stability Oversight Council (''FSOC''), the Commodity Futures Trading Commission (''CFTC''), the Federal Deposit Insurance Corporation (''FDIC''), and the Board of Governors of the Federal Reserve System (''FRB'').[4]

The compliance dates for the amendments to Rule 17Ad–22(e)(6) and new Rule 17Ad–26 are discussed in Part III.

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I. Introduction

CCAs are an essential part of the infrastructure of the U.S. securities markets.[5] While central clearing and other important functions provided by clearing agencies benefit the markets they serve,[6] clearing agencies can pose systemic risk to the financial system,[7] due in part to the fact that such clearing functions concentrate risk in the clearing agency.[8] Disruption to a clearing agency's operations, or failure on the part of a clearing agency to meet its obligations, could therefore serve as a potential source of contagion, resulting in significant costs not only to the clearing agency itself or its members but also to other market participants and the broader U.S. financial system.[9] As a result, proper management of the risks associated with CCAs is necessary to help ensure the stability of the U.S. securities markets and the broader U.S. financial system.[10]

Whether in normal or stressed market conditions, the effective functioning of the securities markets requires a regulatory framework for CCAs that can promote effective risk management, help preserve financial stability, and help ensure the continuity of critical CCP and CSD functions for the markets they serve, participants in those markets, and investors more generally. Since the enactment of the Dodd-Frank Act,[11] the Commission has adopted a series of rules designed to support its ongoing supervision and oversight of clearing agencies and to help ensure that CCAs are robust and resilient under normal market conditions and in periods of market stress.[12] The potential for CCAs to spread contagion through the financial system, particularly in periods of market stress, has necessitated that the Commission continue to consider and adopt new rules over time to improve the regulatory framework for CCAs. These series of rules help ensure an effective regulatory response to evolving risks that could threaten the U.S. financial system.[13]

Since the Commission first adopted the CCA Standards, supervisory authorities, CCAs, and market participants have continued to pursue further consideration of several topics,

[4] *See, e.g.,* 12 U.S.C. 5464(a)(2); 5472.

[5] *See* Release No. 34–78961 (Sept. 28, 2016), 81 FR 70786, 70789 (Oct. 13, 2016) (''CCA Standards Adopting Release''), *https://www.govinfo.gov/content/pkg/FR-2016-10-13/pdf/2016-23891.pdf; see also* 15 U.S.C. 78q–1(a)(1)(A) (finding that the prompt and accurate clearance and settlement of securities transactions, including the transfer of record ownership and the safeguarding of securities and funds related thereto, are necessary for the protection of investors and persons facilitating transactions by and acting on behalf of investors). CCAs are a subset of clearing agencies registered with the Commission. *See* 17 CFR 240.17ad–22(a) (defining ''covered clearing agency''); *see also infra* note 6 (explaining further the definition of ''covered clearing agency'' and two functions of a CCA).

[6] Two functions are that of the central counterparty (''CCP'') and the central securities depository (''CSD''), each of which constitutes a financial market infrastructure (''FMI''). A CCP is a clearing agency that interposes itself between the counterparties to securities transactions, acting functionally as the buyer to every seller and the seller to every buyer. 17 CFR 240.17ad–22(a). A CSD is a clearing agency that is a securities depository as described in section 3(a)(23)(A) of the Exchange Act. *Id.* CCAs are clearing agencies registered with the Commission that provide CCP or CSD services. *See* 17 CFR 240.17ad–22(a).

[7] CCA Standards Adopting Release, *supra* note 5, at 70792; *see also* 12 U.S.C. 5461–72 (setting forth provisions under the Clearing Supervision Act for designating a clearing agency as systemically important and imposing risk management standards consistent with international standards).

[8] CCA Standards Adopting Release, *supra* note 5, at 70793.

[9] *Id.; see also* Committee on Payment and Settlement Systems, International Organization of Securities Commissions (''CPMI–IOSCO''), *Principles for financial market infrastructures* (Apr. 16, 2012), *http://www.bis.org/publ/cpss101a.pdf* (''PFMI'') (identifying the risks posed by FMIs, including CCPs and CSDs, across 23 discrete principles). The Committee on Payment and Settlement Systems renamed itself the Committee on Payments and Market Infrastructures (''CPMI'') in 2014.

[10] CCA Standards Adopting Release, *supra* note 5, at 70788 n.18.

[11] Public Law 111–203, 124 Stat. 1376 (2010).

[12] *E.g.,* 17 CFR 240.17ad–22; 17 CFR 240.17ad–25; *see also* Release No. 34–9895 (Nov. 16, 2023), 88 FR 84454 (Dec. 5, 2023) (''CA Governance Adopting Release''), *https://www.govinfo.gov/content/pkg/FR-2023-12-05/pdf/2023-25807.pdf;* Release No. 34–88616 (Apr. 9, 2020), 85 FR 28853 (May 14, 2020) (''CCA Definition Adopting Release''), *https://www.govinfo.gov/content/pkg/FR-2020-05-14/pdf/2020-07905.pdf;* CCA Standards Adopting Release, *supra* note 5; Release No. 34–68080 (Oct. 22, 2012), 77 FR 66219 (Nov. 2, 2012), *https://www.govinfo.gov/content/pkg/FR-2012-11-02/pdf/2012-26407.pdf.*

[13] *See infra* Part II (discussing the rule amendments and new rules in greater detail). In addition, when designated as systemically important by the FSOC, CCAs are also subject to requirements set forth in Title VIII of the Dodd-Frank Act and rules thereunder. *See, e.g.,* 12 U.S.C. 5461–72.

including the collection of margin generally, the collection of intraday margin specifically, the potential effects of such margin collection on market liquidity, and the need for some transparency into the margin collection process so that market participants that use or rely on CCAs for risk management functions can monitor and manage their own financial and other risks.[14]

Although the CCA Standards adopted in 2016 included several provisions directed to a CCA's margin system generally,[15] and specifically the modeling of financial risk and the collection of margin within it,[16] the Commission has identified two areas of focus that support strengthening these pre-existing rules: (i) ensuring effective monitoring of intraday exposures and specifying particular circumstances for collection of margin intraday, and (ii) ensuring that CCAs have effective tools for margin modelling even when inputs to the margin system become unreliable or unavailable. Ongoing monitoring by the CCA is necessary to help ensure that a CCA collects sufficient margin to cover its exposures throughout the day, as portfolios and positions may change after margin is collected at the start of the day. This requirement should help ensure that the CCAs have the appropriate policies and procedures to address market events featuring large intraday price and position changes, such as the events in the equity and options markets in early 2021.[17] In addition, establishing backup procedures if a substantive input to a margin model is unavailable or unreliable is especially relevant to ensuring that a CCA can continue to meet its regulatory obligations and calculate margin appropriately.

Accordingly, in the RWP Proposing Release,[18] the Commission proposed new requirements to ensure that CCAs monitor intraday margin on an ongoing basis and to facilitate intraday margin collection not only in ''defined'' circumstances but as frequently as circumstances warrant.[19] The Commission also defined two circumstances in which a CCA should have policies and procedures for applying intraday margin: (i) when specific risk thresholds have been breached, and (ii) when the products cleared or markets served display elevated volatility.[20] As the Commission explained in the RWP Proposing Release, these requirements would help ensure that the CCA has an effective process for monitoring margin and avoiding circumstances in which a participant becomes under-margined, which undermines the ability of a CCA to mitigate risk.[21] In addition, with respect to the inputs into a CCA's margin system, the Commission proposed to expand existing requirements requiring timely and reliable price data beyond that limited topic to also encompass other substantive inputs to a CCA's risk-based margin system, to help ensure that mechanisms are in place to calculate margin during periods where inputs become unavailable, such as if a data feed becomes interrupted or corrupted.[22] In Parts II.A and B, the Commission discusses these new requirements in greater detail, in addition to addressing the comments received on the proposed rules.

Importantly, to be resilient in times of market stress, a CCA will need to monitor intraday risk on an ongoing basis and use timely and accurate data inputs to its margin system. Each helps ensure that a CCA can, in turn, calculate and collect margin in a timely manner, managing its exposures to its participants throughout the day. In times of rapidly evolving or stressed market conditions, a CCA must be able to monitor risk and collect margin while also effectively analyzing the potential impact of any intraday collections on market liquidity and financial stability.

Even a robust and resilient CCA may face stressed market conditions or other events so extreme that the resources it has reserved for potential loss scenarios will prove insufficient. For example, depending on the markets they serve, CCAs may hold financial resources sufficient to withstand the default of the one or two largest participant families from among their clearing participants.[23] Such CCAs may not have sufficient prefunded resources to withstand defaults beyond these,[24] and would, in such a circumstance, be charged with allocating losses among their non-defaulting participants to close out the portfolios of its defaulting participants.[25] CCAs may also find that stressed market conditions lead to liquidity shortfalls or that certain events drain other capital sources that impair the functioning of the CCA. Accordingly, to help preserve financial stability and ensure the continuity of critical CCP and CSD functions in periods of extreme stress, a resilient CCA still needs to plan effectively to replenish financial resources when depleted, address and allocate losses when they accrue, and, if the CCA is unable to allocate losses and replenish depleted resources, implement an orderly wind-down and cessation or transfer of its business. If a CCA is unable to take these steps in a transparent, orderly, and effective way, it will serve as a source of contagion, resulting in the potential for significant costs not only to the CCA itself or its clearing members but also to other market participants and the broader U.S. financial system.[26]

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[14] *E.g.,* CPMI–IOSCO, *Streamlining Variation Margin in Centrally Cleared Markets—Examples of Effective Practices* (Feb. 14, 2024), *https://www.bis.org/cpmi/publ/d221.pdf;* CPMI–IOSCO, *Transparency and Responsiveness of Initial Margin in Centrally Cleared Markets—Review and Policy Proposals* (Jan. 16, 2024), *https://www.bis.org/bcbs/publ/d568.pdf;* CPMI–IOSCO, *Resilience of Central Counterparties (CCPs): Further Guidance on the PFMIs* (July 2017), *https://www.bis.org/cpmi/publ/d163.pdf* (''CPMI–IOSCO Resilience Guidance'').

[15] *See, e.g.,* 17 CFR 240.17ad–22(e)(6).

[16] *See* 17 CFR 240.17ad–22(e)(6)(i) (regarding the setting of margin levels commensurate with the risks and particular attributes of each relevant product, portfolio, and market); (e)(6)(iii) (regarding the calculating of margin sufficient to cover the CCA's potential future exposure to its participants); (e)(6)(vi) (regarding the monitoring and regular review, testing, and verification of margin models using backtesting and sensitivity analysis).

[17] For example, a CCA may require more margin to guard against an increased risk of defaults, which may occur if, for example, buyers do not carry-through on paying for a stock that has plummeted or sellers do not carry-through on delivering a stock that has skyrocketed. *See, e.g.,* Staff Report on Equity and Options Market Structure Conditions in Early 2021, at 31 (Oct. 14, 2021), *https://www.sec.gov/files/staff-report-equity-options-market-struction-conditions-early-2021.pdf* (describing how the National Securities Clearing Corporation (''NSCC'') observed unusual volatility in certain securities in January 2021 and imposed intraday margin calls in response to trading patterns in Gamestop Corp. (''GME'') and other equity securities).

[18] *See* Release No. 34–97516 (May 17, 2023), 88 FR 34708, 34708 (May 30, 2023) (''RWP Proposing Release''), *https://www.govinfo.gov/content/pkg/FR-2023-05-30/pdf/2023-10889.pdf.*

[19] *See infra* Parts II.A and B (further discussing these amended requirements).

[20] *See infra* Part II.A (further discussing these amended requirements).

[21] RWP Proposing Release, *supra* note 18, at 34714.

[22] *Id.* at 34715.

[23] *See, e.g.,* 17 CFR 240.17ad–22(e)(4)(i), (ii) (establishing requirements related to maintaining financial resources at the minimum to enable a CCA to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the one or two participant families that would potentially cause the largest aggregate credit exposure for the CCA in extreme but plausible market conditions).

[24] Financial Stability Board (''FSB''), *Central Counterparty Financial Resources for Recovery and Resolution* (Mar. 10, 2022), *https://www.fsb.org/wp-content/uploads/P090322.pdf* (''FSB Analysis'').

[25] *See, e.g.,* CPMI–IOSCO, *Recovery of financial market infrastructures* (rev. July 2017), at 2.4, *https://www.bis.org/cpmi/publ/d162.pdf* (explaining considerations related to CCP recovery in circumstances where the CCP's prefunded financial resources have been depleted) (''CPMI–IOSCO Recovery Guidance'').

[26] The RWP Proposing Release discusses in greater detail the relationship between RWPs implemented by CCAs and the considerations related to orderly resolution of financial companies

Although the CCA Standards adopted in 2016 included a requirement for CCAs to have policies and procedures that provide for plans for recovery and orderly wind-down, the Commission did not include in the rule the specific elements to be required as part of such plans.[27] The Commission stated that, given the nature of recovery and resolution planning, the RWP would likely reflect the specific characteristics of the CCA (*e.g.,* its ownership, organizational, and operational structures, as well as its size, systemic importance, global reach, and/or the risks inherent in the products it clears).[28] Since that time, each CCA has developed an RWP pursuant to the requirement for such plans in Rule 17Ad–22. In addition, the Commission has, through its supervisory process and through its participation in the ongoing consideration of issues regarding CCP recovery and resolution,[29] identified several elements that should be included in any RWP regardless of the market served or the products cleared, to help ensure that planning is effective, thoughtful, and thorough.

Accordingly, in the RWP Proposing Release,[30] the Commission proposed new requirements directed to establishing specific elements of all RWPs across CCAs, including: requirements to identify critical systems and service providers and related staffing that would support these functions, to be maintained in a recovery or wind-down scenario; [31] the identification and analysis of scenarios and triggers that could necessitate implementation of a recovery or wind-down; [32] the identification and analysis of which tools would be appropriate in certain scenarios in order to facilitate recovery or an orderly wind-down; [33] requirements for effecting implementation of the plan; [34] notification to the Commission; [35] robust annual testing with participants and key stakeholders, as appropriate; [36] and provisions for board review and approval of the plan and any material changes thereto.[37] As discussed in the RWP Proposing Release, these new requirements draw from existing practices at CCAs.[38] In Parts II.C and D, the Commission discusses in greater detail these new requirements, codified in new Rule 17Ad–26, in addition to addressing the comments received on the proposed rules. New Rule 17Ad–26 promotes three important objectives: (i) bolstering the existing RWPs at CCAs; (ii) codifying some existing RWP elements to ensure that these elements remain in the plans over time; and (iii) establishing that the RWP of any new CCA would contain each of the elements specified in the rule.[39] By advancing these objectives, new Rule 17Ad–26 helps ensure that, in times of extreme market stress, the recovery or wind-down of a CCA can preserve financial stability and ensure the continuity of critical CCP or CSD functions.[40]

The Commission received comments on the RWP Proposing Release from CCAs, industry groups (representing both clearing agencies and their participants), other market participants, academics, individual investors, and other interested parties.[41] Commenters were generally supportive of the proposal, though some commenters also expressed concerns regarding specific elements of the proposed rules. In Part II, the Commission discusses these comments in detail and the modifications made to the final rules to address comments received. As discussed further in Part II, the Commission is adopting each of the proposed rules, some substantially as proposed and others with certain modifications.

In addition, and separate from the Commission's proposed rules for CCAs, the CFTC also has proposed rules directed to the RWPs of systemically important derivatives clearing organizations (''SIDCOs'') under the Commodity Exchange Act.[42] Like the Commission's final rules for CCAs adopted in this release, the CFTC's proposed rules are intended to codify certain common elements of RWPs across SIDCOs. With respect to some elements of final Rule 17Ad–26, the Commission has taken a different approach from the CFTC's proposed rule. For example, given the range of products cleared and markets served across CCAs, the Commission has not included in Rule 17Ad–26 requirements for scenarios at the same level of granularity as the CFTC. Nonetheless, the final Rule 17Ad–26 and the CFTC's proposal are aligned in their objectives and promote substantially similar outcomes. The differing approaches are discussed further in Part II.C.10.[43]

II. Discussion of Comments Received and Final Rules

A. Collection of Intraday Margin

1. Proposed Amendment to Rule 17Ad–22(e)(6)(ii)

The RWP Proposing Release proposed to strengthen the preexisting requirements in Rule 17Ad–22(e)(6)(ii) for a CCA to have policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, among other things, includes the operational capacity to make intraday margin calls in defined circumstances.[44] Specifically, the proposed amendments to Rule 17Ad–22(e)(6)(ii) required a CCA that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to establish a risk-based margin system that, among other things, includes the authority and operational capacity to (i) monitor intraday exposure on an ongoing basis, and (ii) to make intraday margin calls as

by the FDIC pursuant to Title II of the Dodd-Frank Act. RWP Proposing Release, *supra* note 18, at 34712.

[27] *See* 17 CFR 240.17ad–22(e)(3)(ii) (requiring ''plans for the recovery and orderly wind-down of the CCA necessitated by credit losses, liquidity shortfalls, losses from general business risk, or any other losses'').

[28] RWP Proposing Release, *supra* note 18, at 34709 (citing CCA Standards Adopting Release, *supra* note 5, at 70808–09).

[29] *E.g.,* CPMI–IOSCO Recovery Guidance, *supra* note 25; FSB Analysis, *supra* note 24; FSB, *Financial Resources and Tools for Central Counterparty Resolution* (Apr. 25, 2024), *https://www.fsb.org/wp-content/uploads/P250424-1.pdf* (''FSB Guidance'').

[30] *See* RWP Proposing Release, *supra* note 18, at 34715–16.

[31] *See infra* Parts II.C.1 and 2 (discussing critical services and service providers, respectively).

[32] *See infra* Parts II.C.3 and 4 (discussing scenarios and triggers, respectively).

[33] *See infra* Part II.C.5 (discussing tools).

[34] *See infra* Part II.C.6 (discussing requirements related to implementation).

[35] *See infra* Part II.C.7 (discussing notification to the Commission).

[36] *See infra* Part II.C.8 (discussing the testing requirement).

[37] *See infra* Part II.C.9 (discussing board review and approval of the RWP and material changes thereto, including material changes to the covered clearing agency's operations that would significantly affect the viability or execution of the RWP).

[38] RWP Proposing Release, *supra* note 18, at 34709.

[39] *See id.* at 34711.

[40] *Id.* at 34712. In April, the FSB published guidance describing the existing set of financial resources and tools available for use by resolution authorities (such as the FDIC), in a CCP resolution. FSB Guidance, *supra* note 29. The FSB Guidance is relevant to some of the comments received on proposed Rule 17Ad–26, as discussed further in Part II.

[41] Comments received are available on the Commission's website at *https://www.sec.gov/comments/s7-10-23/s71023.htm.*

[42] *Derivatives Clearing Organizations Recovery and Order Wind-Down Plans, Information for Resolution Sharing* (July 3, 2023), 88 FR 48968, 48972–73 (July 28, 2023), *https://www.govinfo.gov/content/pkg/FR-2023-07-28/pdf/2023-14457.pdf.*

[43] Commission staff communicates with the CFTC staff regularly on topics of mutual interest for their respective registrants, including RWPs, and has consulted with CFTC staff regarding RWPs.

[44] RWP Proposing Release, *supra* note 18, at 34713.

frequently as circumstances warrant, including when risk thresholds specified by the CCA are breached or when the products cleared or markets served display elevated volatility.[45]

2. Discussion of Comments

a. Monitoring Intraday Exposure on an Ongoing Basis: Rule 17Ad–22(e)(6)(ii)(B)

When adopted in 2016, preexisting Rule 17Ad–22(e)(6)(ii) included the requirement that CCAs have the authority and operational capacity to make intraday margin calls.[46] In the RWP Proposing Release, the Commission stated that the ''operational capacity'' to make intraday margin calls ''includes the ability to monitor intraday exposure; otherwise, it would be impossible for a CCA to make appropriate intraday margin calls if it were not monitoring its intraday exposure.'' [47] Therefore, as originally adopted, Rule 17Ad–22(e)(6)(ii) required a CCA to have some ability to monitor for intraday exposure and make intraday margin calls but did not include a specific requirement to monitor for intraday exposure or regarding the frequency at which to monitor intraday exposures.[48]

In the RWP Proposing Release, the Commission stated its continued belief, consistent with its statements when adopting the CCA Standards, that it is essential that a CCA monitor its intraday exposures because the CCA faces a risk that a CCA's exposure to its participants can change rapidly because of intraday changes in prices, positions, or both.[49] The Commission further stated that a requirement that such monitoring occur on an ongoing basis would contribute to ensuring that the CCA is sufficiently informed and situated to take appropriate actions to manage any intraday exposure that arises.[50] The Commission also stated that being able to monitor, on an ongoing basis, any decrease in the margin coverage (as compared to the changes in intraday credit exposures in its participants' portfolios) should help a CCA ensure that it is able to collect margin sufficient to cover its participants' exposures.[51] The Commission further stated that this requirement to monitor intraday exposure on an ongoing basis should provide each CCA with some flexibility to determine what monitoring frequency is appropriate in the market served by the CCA. Therefore, the Commission did not specify a particular time period or frequency for monitoring on an ongoing basis because a CCA ''should be able to tailor its monitoring to the particular products cleared and markets served.'' [52]

Commenters generally recognized the importance of monitoring intraday exposure.[53] Several commenters agreed with the approach in the proposal not to prescribe a particular monitoring frequency that would constitute an ''ongoing basis,'' because of the need for a CCA to be able to tailor its monitoring to the particular products cleared and markets served.[54] For example, one such commenter stated that, rather than the Commission prescribing a monitoring frequency, a CCA's monitoring ''should align with each [CCA's] scheduled settlement, initial margin, and variation margin practices to support financial stability in both normal and volatile market conditions.'' [55]

By contrast, one commenter stated that the Commission should prescribe some particular universal, minimum monitoring frequency (*i.e.,* establishing a maximum time between instances of a CCA's intraday monitoring of its credit exposures).[56] This commenter acknowledged the benefit that would arise from deferring ongoing monitoring assessments to a CCA, but supported that the Commission include a universal, minimum monitoring frequency in this requirement.[57] Specifically, this commenter stated that ''every 15 minutes should be the absolute minimum'' for frequency of monitoring intraday exposures related to any possible intraday margin collection.[58]

The Commission is adopting the requirement to monitor intraday exposures on an ongoing basis as proposed.[59] As stated in the RWP Proposing Release, a CCA should be able to tailor its risk monitoring to the particular products cleared and the markets served.[60] Accordingly, the proposed requirement to monitor intraday exposures on an ongoing basis is designed to allow a CCA to determine what monitoring frequency is appropriate for its particular market.[61] A CCA needs this flexibility because ''more frequent monitoring may be necessary for a CCA that operates in markets where intraday trading may be more prevalent'' (such as, for example, in the U.S. Treasury market),[62] or

[45] *Id.* at 34712–14. The preexisting requirement in Rule 17Ad–22(e)(6)(ii) to establish written policies and procedures that provide for marking participant positions to market and collecting margin, including variation margin or equivalent charges if relevant, at least daily, would be unchanged under the amendments being adopted in this release.

[46] *Id.* at 34713.

[47] *Id.*

[48] *Id.*

[49] *Id.*

[50] *Id.; see also* CPMI–IOSCO Resilience Guidance, *supra* note 14, at 5.2.2 (discussing how a CCP addresses intraday exposure in its margin system and stating that ''a CCP faces the risk that its exposure to its participants can change rapidly as a result of intraday changes in prices, positions, or both; ie [sic], adverse price movements, as well as participants building larger positions through new trading (and settlement of maturing trades). For the purposes of addressing these and other forms of risk that may arise intraday, a CCP should address and monitor on an ongoing basis how such risks affect all components of its margin system, including initial margin, variation margin and add-on charges.'').

[51] RWP Proposing Release, *supra* note 18, at 34713. The Commission also explained that a CCA ''generally should consider whether its intraday monitoring considers how participants' exposures would affect all risks faced by the CCA, including those that may already by contemplated by variation margin, initial margin, or add-on charges.'' *Id.*

[52] *Id.*

[53] Letter from Megan Malone Cohen, Corporate Secretary, General Counsel, The Options Clearing Corporation (July 17, 2023) at 3 (''OCC''); Letter from Timothy Cuddihy, Managing Director, Group Chief Risk Officer, Depository Trust & Clearing Corporation (July 17, 2023) at 3 (''DTCC''); Letter from Ullrich Karl, Head of Clearing Services, International Swaps and Derivatives Association, and Jacqueline Mesa, Senior Vice President, Futures Industry Association (July 17, 2023) at 6 (''The Associations''); Letter from Stephen W. Hall, Legal Director and Securities Specialist, Better Markets, Inc. (July 17, 2023) at 7 (''Better Markets''); Letter from Chris Edmonds, Chief Development Officer, Intercontinental Exchange (July 19, 2023) at 2 (''ICE''); *see also* Letter from Sarah Bessin, Deputy General Counsel, Investment Company Institute (Sept. 26, 2023) at 10 (''ICI'') (generally supporting the Commission's proposed amendments).

[54] OCC at 3; Letter from Global Association of Central Counterparties (July 17, 2023) at 2 (''CCP12''); DTCC at 3; *see also* ICE at 2 (stating that clearing agencies should continue to have the flexibility to determine the appropriate timeframe for intraday monitoring).

[55] CCP12 at 2.

[56] *See* The Associations at 6.

[57] *Id.* at 6.

[58] *Id.*

[59] The Commission is adding paragraph divisions to Rule 17Ad–22(e)(6)(ii) to better delineate the sections of the rule, for clarity. The portion of the rule text regarding monitoring intraday exposure would be Rule 17Ad–22(e)(6)(ii)(B). The Commission is also adding ''(A)'' before the portion of the rule that relates to marking participant positions to market and collecting margin at least daily and changing the punctuation at the end of that section to a semi-colon, as opposed to a comma. The Commission is also revising the punctuation at the end of Rule 17Ad–22(e)(6)(ii)(B) to a semicolon, as opposed to a comma.

[60] RWP Proposing Release, *supra* note 18, at 34713.

[61] *Id.*

[62] *See, e.g.,* Release No. 34–99149 (Dec. 13, 2023), 89 FR 2714, 2782 (Jan. 16, 2024) (''Treasury Clearing Adopting Release''), *govinfo.gov/content/pkg/FR-2024-01-16/pdf/2023-27860.pdf* (''Today, [proprietary trading firms] actively buy and sell large volumes of U.S. Treasury securities on an intraday basis using high-speed and other algorithmic trading strategies.''); *James C. Harkrader & Daniel J. Weitz, FEDS Notes: How Do Principal Trading Firms and Dealers Trade around FOMC Statement Releases?* (Dec. 31, 2020), *https://www.federalreserve.gov/econres/notes/feds-notes/how-do-principal-trading-firms-and-dealers-trade-around-fomc-statement-releases-20201231.html.*

alternatively where a CCA's ''intraday exposures may tend to be larger because of specific features, such as the settlement process.'' [63]

In response to the commenter seeking a required mandatory minimum frequency for intraday monitoring, the Commission does not agree that such a requirement is necessary. Previously, the Commission stated that a CCA generally should consider whether its policies and procedures for intraday monitoring address how participants' exposures would affect financial risks faced by the CCA.[64] For example, some CCA margin methodologies may be designed to account for some intraday price and position changes, which could have an impact on the appropriate intraday monitoring frequency. Therefore, the Commission is not adopting a minimum monitoring frequency. The Commission, however, would be able to consider whether a particular CCA's intraday monitoring frequency is reasonably designed to meet this requirement within the proposed rule change process when changes thereto are filed as a proposed rule change, including what the CCA has identified as the appropriate ongoing basis for the products cleared and the markets served and in light of the entirety of the CCA's margin methodology (that is, whether it has other components which account for some intraday price and position changes).[65] More generally, whether a CCA has established, implemented, maintained and enforced written policies and procedures reasonably designed to comply with Rule 17Ad–22(e) is subject to examination.

When designing its intraday margin monitoring, a CCA generally should consider whether its monitoring encompasses all aspects of intraday exposures, including how such exposures affect all components of a CCA's margin model, including initial margin, variation margin, and add-on charges.[66] A CCA also generally should consider whether its basis to recalculate margin intraday accounts for both position changes and price volatility.

b. Circumstances for Intraday Margin Calls

Preexisting Rule 17Ad–22(e)(6)(ii) also required that a CCA's written policies and procedures be reasonably designed to include the authority and operational capacity to make intraday margin calls ''in defined circumstances.'' [67] However, preexisting Rule 17Ad–22(e)(6)(ii) did not define what constitutes ''defined circumstances.'' [68] In proposing the requirement regarding collecting intraday margin as frequently as ''circumstances warrant,'' the Commission stated that the proposed requirement would build upon and expand this preexisting requirement (*i.e.,* to have the authority and operational capacity to make intraday margin calls in ''defined circumstances''). Specifically, the proposed requirement would identify two particular circumstances: (1) when risk thresholds specified by the CCA are breached or (2) when the products cleared or markets served display elevated volatility. The proposed requirement would also continue to provide flexibility to CCAs to make intraday margin calls as frequently as circumstances warrant.[69]

Commenters generally agreed with the need for thresholds regarding when a CCA would make intraday margin calls. However, commenters raised several concerns which are addressed below.[70]

i. Scheduled vs. Unscheduled Intraday Calls

Several commenters suggested that intraday margin calls generally should be scheduled, with unscheduled intraday margin calls limited to extreme circumstances.[71] One such commenter specified that scheduled intraday margin calls should be at the same time every day, in the early afternoon.[72] This commenter explained that the unpredictability of unscheduled intraday margin calls may require a fund (which is a participant in a CCA) to keep a portion of its assets in lower-yielding, highly liquid assets.[73]

In response to these comments seeking additional requirements for scheduled intraday margin calls and to limit unscheduled intraday margin calls, the Commission recognizes that scheduled intraday margin calls provide certainty for market participants about when resources will be needed. However, there may be circumstances that arise intraday, such as in times of elevated volatility or significant position changes, where a CCA needs to manage its exposure to a participant through an unscheduled margin call.[74] In such circumstances, scheduled intraday margin calls may not be sufficient to ensure that a CCA collects margin to cover its exposure to its participants. To ensure strong risk management in such circumstances, CCAs need to have the ability to make unscheduled intraday margin calls. It would not be appropriate to mandate that CCAs only make scheduled intraday margin calls, and, therefore, the Commission is not adopting such a requirement to require scheduled intraday margin calls.

However, the Commission understands the need for market participants to plan for the potential resources needed to meet intraday margin calls. To that end, the amended Rule 17Ad–22(e)(6)(ii)(C) states that a CCA must establish policies and procedures regarding at least two particular circumstances in which a CCA would make intraday margin calls, that is, when risk thresholds specified by the CCA are breached and when products cleared or markets served display elevated volatility, as discussed in Part II.A.2.b *infra.* For example, a CCA could specify that its risk threshold is breached when the difference between a member's start of day margin and a calculation of its intraday margin based on its new positions exceeds a predetermined percentage or dollar amount. Thus, market participants should be able to plan for their potential resource needs to meet intraday margin calls because, as discussed in Part II.A.2.b.ii *infra,* a CCA is required to have certain transparency around its margin model. This transparency will allow a market participant to understand those specified circumstances in which a CCA would make intraday margin calls and would therefore allow the market participant to make arrangements for additional liquidity in such circumstances, such

[63] RWP Proposing Release, *supra* note 18, at 34713.

[64] These risks could include those that ''may already be contemplated by variation margin, initial margin, or add-on charges.'' *Id.*

[65] *See infra* note 84 and accompanying text.

[66] *See, e.g.,* CPMI–IOSCO Resilience Guidance, *supra* note 14, at 5.2.22.

[67] 17 CFR 240.17ad–22(e)(6)(ii).

[68] *Id.; see also* RWP Proposing Release, *supra* note 18, at 34713.

[69] RWP Proposing Release, *supra* note 18, at 34713–14.

[70] *See* The Associations; Better Markets; ICI; Letter from Thomas F. Price, Managing Director, Technology, Operations, and Business Continuity, SIFMA, and William C. Thum, Managing Director and Associate General Counsel, SIFMA Asset Management Group (Sept. 26, 2023) (''SIFMA'').

[71] ICI at 10–11; Letter from John P. Davidson (June 5, 2023) at 2, 9 (''Davidson'') (stating that intraday financial flows should be mandatory at a fixed scheduled time and at the same time across all linked CCPs, but also acknowledging ''the occasional need for an additional set of intraday cash and collateral movements in cases of truly extreme market moves'').

[72] SIFMA at 8.

[73] *Id.*

[74] For example, if a CCA schedules intraday margin collection at noon every day, there may be instances when thresholds are triggered after that scheduled time, and the CCA would then make an unscheduled margin call to avoid significant exposure being carried overnight.

as, for example, securing additional financing to cover such margin calls.

ii. Need for Clear Thresholds and Transparency

Commenters also requested that the Commission revise the proposal to mandate that a CCA define its criteria for any unscheduled intraday margin call in advance of any unscheduled intraday margin call and to require additional disclosures regarding intraday margin calls.[75] These commenters stated that requiring clear and transparent policies regarding the conditions under which a CCA might make an intraday margin call, both on a scheduled and unscheduled basis, would enhance participants' ability to prepare for these margin calls and understand any potential demands on their liquidity arising from such a call.[76]

The Commission agrees with the commenters that it is essential that a CCA determine and clearly communicate *ex ante* in what circumstances it would make both scheduled and *ad hoc* intraday margin calls. However, as discussed further below, CCAs already are subject to such requirements in preexisting Rule 17Ad–22(e)(6)(ii) and (e)(23) and 17 CFR 240.19b–4 (''Rule 19b–4''). Further, by specifying two instances in which CCAs must establish, implement, maintain and enforce policies and procedures to collect intraday margin, the amendments being adopted in this release will identify for clearing participants conditions under which a CCA would make an intraday margin call.[77]

First, with respect to the commenters' request to require that CCAs determine the circumstances for intraday margin calls, a CCA already is required, under preexisting Rule 17Ad–22(e)(6)(ii), to have certain policies and procedures regarding intraday margin. These policies and procedures are the framework that a CCA uses when determining whether to make intraday margin calls, and these policies and procedures must identify the circumstances in which a CCA would make intraday margin calls.[78] This requirement will be strengthened by the amendments adopted in this release, which provide more specificity that the CCA must have policies and procedures to be able to make intraday margin calls as frequently as circumstances warrant and in two particular circumstances identified in the rule. Specifically, the amendments to preexisting Rule 17Ad–22(e)(6)(ii) require that a CCA have written policies and procedures to cover its credit exposures to its participants by establishing a risk-based margin system, which, among other things, includes the authority and operational capacity to make intraday margin calls ''as frequently as circumstances warrant'' including in two particular situations: when risk thresholds specified by the CCA are breached and in times of elevated volatility. This requirement should ensure that the CCA develops *ex ante* policies and procedures to determine risk thresholds for intraday margin and when it considers volatility to be elevated above typical levels in a manner specific to the products cleared and the markets served. Because these amendments would identify specific circumstances in which a CCA must have the authority and operational capacity to make intraday margin calls which would be part of a CCA's overall disclosure requirements regarding its margin methodology, as discussed further below,[79] these amendments should improve participants' ability to understand when they may be subject to additional margin calls. This improved understanding should further allow participants to be better able to prepare to provide additional financial resources in anticipation of additional margin calls.[80]

Second, with regard to the commenters' request to clearly communicate *ex ante* the circumstances in which a CCA would make intraday margin calls, the Commission agrees that such *ex ante* transparency is essential for a CCA's participants, but disagrees that any additional requirements are necessary to achieve such transparency. A CCA's participants already have such transparency for several reasons. As a registered clearing agency, a CCA is a self-regulatory organization (''SRO'') under the Exchange Act,[81] subject to the provisions of section 19(b) of the Exchange Act which requires public notice and an opportunity for public comment on any rule changes that an SRO seeks to adopt.[82] In addition, a CCA potentially is a ''designated financial market utility'' (alternatively, a ''systemically important financial market utility'' or ''SIFMU'') subject to section 806(e) of the Dodd-Frank Act regarding advance notice of material changes to its rules, procedures, or operations that could materially affect the nature or level of risks presented. Further, the CCA Standards impose requirements related to transparency and disclosure to its participants.

A CCA's margin methodology, which would include, among other things, the criteria used to determine whether to make intraday margin calls, constitutes a material aspect of its operations, meaning that it is part of a CCA's stated policies, practices, or interpretations under Exchange Act Rule 19b–4.[83] As such, a CCA's margin methodology is subject to the filing obligations applicable to SROs under section 19(b) of the Exchange Act regarding any proposed rule or proposed change to its rules.[84] The proposed rule filing process provides transparency into an SRO's proposed changes, through notice and comment. An SRO is obligated to file its proposed rule changes in a manner consistent with the requirements in Form 19b–4, which is intended to elicit information necessary for the public to

[75] The Associations at 2; Better Markets at 8; ICI at 10–11; SIFMA at 9.

[76] The Associations at 2–3 (requesting ''clear and transparent policies with regards to the conditions under which a [CCA] might call intraday margin''); Better Markets at 8 (requesting ''full transparency for triggers of intraday margin calls''); SIFMA at 9 (requesting ''published triggers and thresholds to calculate both start of day and intraday margin requirements''); ICI at 11 (requesting a CCA ''communicate to market participants the thresholds that would trigger both scheduled and ad hoc [sic] intraday margin calls'').

[77] The Commission is adding paragraph divisions to Rule 17Ad–22(e)(6)(ii) to better delineate the sections of the rule, for clarity. The portion of the rule text regarding the authority and operational capacity to make intraday margin calls is in Rule 17Ad–22(e)(6)(ii)(C).

[78] This framework is not required to foreclose or prohibit the use of any discretion in such determinations, as discussed further in Part II.A.2.b.iii, *infra.*

[79] *See infra* notes 81–100 and accompanying text (discussing several Commission requirements that promote disclosure and transparency).

[80] RWP Proposing Release, *supra* note 18, at 34714.

[81] 15 U.S.C. 78c(a)(26) (''The term 'self-regulatory organization' means any [. . .] registered clearing agency'').

[82] *See, e.g., infra* note 87 (discussing such changes that previously have been considered by the Commission); *infra* note 119 (describing Commission rules that promote transparency regarding margin practices at registered clearing agencies).

[83] 17 CFR 240.19b–4(a)(6)(i) (defining ''stated policy, practice, or interpretation'' to include, *inter alia,* ''[a]ny material aspect of the operation of the facilities of the self-regulatory organization''). Additionally, Rule 19b–4 would also apply to certain statements that a CCA issues concerning its margin methodology. Specifically, this rule would cover any CCA statement ''made generally available to the membership of [. . . the CCA] that establishes or changes any standard, limit, or guideline, with respect to: (a) the rights, obligations, and privileges of its membership; or (b) the meaning, administration, or enforcement of an existing rule.'' 17 CFR 240.19b–4(a)(6)(ii).

[84] 15 U.S.C. 78s(b)(1) (requiring each SRO to ''file with the Commission, in accordance with such rules as the Commission may prescribe, copies of any proposed rule or any proposed change in, addition to, or deletion from the rules of such self-regulatory organization''); *see also* 17 CFR 240.19b–4. In addition, a stated policy, practice, or interpretation of an SRO (*e.g.,* written policies and procedures) would generally be deemed to be a proposed rule change. *See* 17 CFR 240.19b–4(c).

provide meaningful comment on the proposed rule change and for the Commission to determine whether the proposed rule change is consistent with the requirements of the Exchange Act and the rules and regulations thereunder.[85] The Commission then publishes all proposed rule changes for comment. In this way, the rule filing process promotes transparency to market participants and the public by ensuring notice is provided regarding a CCA's new initiatives or changes to governance, operations, and risk management.[86] With respect to a CCA's margin methodology, the rule filing process should provide transparency about how and when a CCA would calculate margin, including on an intraday basis, which is consistent with the requirements sought by commenters.

The Commission has considered numerous proposed rule changes regarding CCAs' margin methodologies. Notably, these proposed rule changes have addressed CCAs' intraday margin policies and procedures, and these proposed rule changes have identified thresholds and criteria that a CCA would use in determining whether to make an intraday margin call, similar to what the commenters have requested.[87] The notice and comment process provided by section 19(b) of the Exchange Act therefore provides for transparency into a CCA's margin methodology, including input from participants.

In addition, when a CCA is a SIFMU,[88] it is also subject to the regulatory framework of the Clearing Supervision Act.[89] Once designated by FSOC, CCAs that are SIFMUs are required to publicly file 60-days advance notice with the Commission of changes to rules, procedures, and operations that could materially affect the nature or level of risk presented by the designated clearing agency (''advance notice''), and, pursuant to the Commission's rules, the Commission shall provide for prompt publication of such an advance notice, and then the public has the opportunity to comment on such an advance notice.[90] Rule 19b–4(n) defines the term ''materially affect the nature or level of risk presented'' to mean matters as to which there is a reasonable possibility that the change could affect the performance of essential clearing and settlement functions or the overall nature or level of risk presented by the designated clearing agency, and it further provides examples of such potential changes as including, among other things, changes that could materially affect risk management or financial resources of the designated clearing agency.[91] When adopting this requirement, the Commission identified changes to the ''methods for making margin calculations'' as among the additional examples of such matters.[92] Therefore, any changes to the intraday margin policies and procedures of a CCA that has been designated as a SIFMU could also be subject to the advance notice process if the changes constitute a material change to the nature or level of risk presented by the CCA, and the advance notice process would bring additional transparency into such changes.

Moreover, under the CCA Standards, a CCA is obligated to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for publicly disclosing all relevant rules and material procedures, including key aspects of its default rules and procedures.[93] Such public disclosures generally should include a discussion of a CCA's margin methodology, which could include how the CCA determines intraday margin, and they should, in turn, allow a market participant to understand how a CCA calculates margin, including any margin add-ons

[85] *See* General Instructions for Form 19b–4, at Instruction B, *https://www.sec.gov/files/form-19b4-general-instructions.pdf.* The Form 19b–4 specifies the contents that must be included in a proposed rule change filing includes, among other items, a statement of purpose for the proposed rule change, which describes the reasons for adopting the proposed rule change, any problems the proposed rule change is intended to address, the manner in which the proposed rule change will operate to resolve those problems, the manner in which the proposed rule change will affect various persons (*e.g.,* brokers, dealers, issuers, and investors), and any significant problems known to the SRO that persons affected are likely to have in complying with the proposed rule change. *Id.* at Information to Be Included in the Completed Form, Item 3(a). The SRO must also include in its proposed rule change the complete text of the proposed rule. *Id.* at Information to Be Included in the Completed Form, Item 1(a). The SRO may request confidential treatment of any portion of its filing, *see* 17 CFR 240.24b–2, but it would still have to comply with the requirements of Form 19b–4 with respect to describing the contents of the proposed rule change for public comment.

[86] *See* RWP Proposing Release, *supra* note 18, at 34711.

[87] *See, e.g.,* Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, To Implement Changes to the Required Fund Deposit Calculation in the GSD Rulebook, Release No. 34–83362 (June 1, 2018), 83 FR 26514 (June 7, 2018) (File No. SR–FICC–2018–001) (approving proposed rule change to provide transparency with respect to GSD's existing authority under GSD Rule 4 to calculate and assess intraday margin amounts, by identifying the three criteria that GSD uses to calculate the intraday amount due ((i) the dollar threshold, which evaluates whether a member's intraday VaR Charge equals or exceeds a set dollar amount when compared to the VaR Charge that was included in the most recent margin collection: (ii) the percentage threshold, which evaluates whether the intraday VaR Charge equals or exceeds a percentage increase of the VaR Charge that was included in the most recent collection; and (iii) the coverage target, which evaluates whether a member is experiencing backtesting results below a 99% confidence level), and stating that FICC assesses intraday margin when all three criteria are breached and, under certain market conditions when the thresholds in (i) and (ii) are breached); FICC Important Notice GOV1244–22 (Apr. 11, 2022) (stating that, consistent with its Rule 4 authority, GSD will assess an Intraday Supplement Fund Deposit on a Netting Member if (i) a change in the Netting Member's Intraday VaR Charge equals or exceeds $1 million when compared to its most recent VaR Charge calculation, (ii) the Netting Member's Intraday VaR Charge equals or exceeds 100% of its most recent VaR Charge calculation, and (iii) the Netting Member's backtesting coverage is below 100%. Additionally, Netting Members who breached the thresholds for (i) and (ii) and have fewer than 100 trading days in a rolling 12-month period will be assessed an Intraday Supplemental Fund Deposit regardless of their backtesting coverage); Order Approving Proposed Rule Change to Adopt Intraday Volatility Charge and Eliminate Intraday Backtesting Charge, Release No. 34–97129 (Mar. 13, 2023), 88 FR 16681 (Mar. 20, 2023) (File No. SR–NSCC–2022–009) (adopting an intraday volatility charge as part of NSCC's margin methodology that would increase the margin collected from members whose trading portfolios experience large and unexpected intraday volatility).

[88] Specifically, the Clearing Supervision Act provides for the enhanced regulation of a CCA that qualifies as a ''financial market utility'' that the FSOC designates as ''systemically important'' (a ''designated financial market utility''). *See* 12 U.S.C. 5462(6)(A) (defining a ''financial market utility'' to include ''any person that manages or operates a multilateral system or the purpose of transferring, clearing, or settling payments, securities or other financial transactions among financial institutions or between financial institutions and the person'') and 12 U.S.C. 5462(4)(defining a ''designated financial market utility'' to mean ''a financial market utility'' that FSOC has designated as ''systemically important''); *see also* 12 U.S.C. 5463 (discussing FSOC's ability to designate entities as ''systemically important''). On July 18, 2012, FSOC designated four CCAs as systemically important financial market utilities: The Depository Trust Company (''DTC''); Fixed Income Clearing Corporation (''FICC''); National Securities Clearing Corporation (''NSCC''); and The Options Clearing Corporation (''OCC''). FSOC, *2012 Annual Report: Appendix A: Designation of Systemically Important Financial Market Utilities* (July 18, 2012), *https://home.treasury.gov/system/files/261/2012-Annual-Report.pdf.*

[89] *See* 12 U.S.C. 5461 *et seq.*

[90] The Clearing Supervision Act defines a ''designated clearing entity'' to include a ''designated financial market utility'' that is a clearing agency registered with the Commission (of which a CCA is a subset). *See* 12 U.S.C. 5462(3). The Clearing Supervision Act defines the Commission as the ''Supervisory Agency'' for the four designated clearing agencies that are CCAs (*i.e.,* DTC, NSCC, FICC, and OCC). *See* 12 U.S.C. 5462(8)(A)(i). The Commission published a final rule concerning the filing and publication of advance notices for designated clearing agencies in 2012. *See* 17 CFR 240.19b–4(n); Release No. 34–67286 (June 28, 2012), 77 FR 41602 (July 13, 2012) (File No. S7–44–10) (''Filing of Advance Notices''), *https://www.govinfo.gov/content/pkg/FR-2012-07-13/pdf/2012-16233.pdf.*

[91] 17 CFR 240.19b–4(n)(2)(i), (ii).

[92] *See* Filing of Advance Notices, *supra* note 90, at 41620.

[93] 17 CFR 240.17ad–22(e)(23)(i).

and cross-margin arrangements with other clearing agencies. In addition, under Rule 17Ad–22(e)(23)(ii), these policies and procedures must provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the CCA.[94]

Rule 17Ad–22(e)(23)(iv) also requires that a CCA produce a comprehensive public disclosure that describes its material rules, policies, and procedures regarding its legal, governance, risk management, and operating framework (a ''Disclosure Framework''), accurate in all material respects at the time of publication, that includes, among other things, a standard-by-standard summary narrative for each applicable standard set forth in paragraphs (e)(1) through (23) of the CCA Standards with sufficient detail and context to enable a reader to understand the CCA's approach to controlling the risks and addressing the requirement in each standard.[95] Therefore, a CCA must issue a public document addressing each of the CCA Standards, including those with respect to margin under Rule 17Ad–22(e)(6).[96] A CCA generally should consider whether its disclosures regarding its margin methodology, through its Disclosure Framework and/or other publicly available documents, allows participants to understand how the model reacts to market conditions and to assess with some reasonable degree of certainty whether it will be subject to a margin call and in what amount. In addition, a CCA generally should consider whether it could provide a public-facing margin calculator to allow its participants, and market participants more generally, to understand the potential amount of any intraday margin calls on their portfolios, including with respect to add-on charges and any applicable cross-margin arrangements.

In light of the existing requirements with respect to transparency in the SRO rule filing process, the advance notice process, and Rule 17Ad–22(e)(23), the Commission does not believe additional mandatory disclosures are necessary at this time. For example, every CCAs' Disclosure Framework discusses the CCAs' margin methodologies.[97] Several CCAs have published documents further outlining their margin methodologies, including the formulas used in calculating margin.[98] A CCA generally should consider whether it provides such information, *i.e.,* the formulas used in calculating margin, to market participants, such that a market participant could make such calculations on its own. Finally, at least one CCA has developed a public calculator to provide market participants with the ability to calculate potential margin obligations on a simulated portfolio, for given positions and market value, using its Value at Risk methodology.[99] Although not a substitute for a market participant's ability to understand a CCA's margin methodology on its own, such a public calculator is a helpful tool for determining how a CCA's margin methodology operates, particularly if the calculator is able to provide information related to add-on charges and any applicable cross-margin arrangements. A CCA generally should consider whether it sufficiently identifies in its Disclosure Frameworks and any other documentation that it makes available the circumstances required under the amendments adopted to Rule 17Ad–22(e)(6)(ii) regarding when a CCA must collect intraday margin. Commenters requested that the Commission require a CCA's intraday margin model to be transparent such that a CCA's participants could anticipate a CCA's future intraday margin calls.[100] As discussed above, a CCA should generally consider whether it sufficiently identifies when Rule 17Ad–22(e)(6)(ii) would require an intraday margin call. Such transparency could improve the ability of a CCA's participants to understand when participants may be subject to additional margin calls. However, participants cannot expect to be able to predict every intraday margin call with complete certainty, and being able to do so may create moral hazard that would undermine the CCA's ability to manage risk effectively.

Finally, one commenter stated that CCAs should proactively engage with clearing members ahead of applying intraday margin calls to alleviate the potential liquidity risk for clearing members.[101] The Commission acknowledges that it could be helpful for a CCA to engage with its clearing members regarding potential upcoming intraday margin calls. Given the potentially fluid nature of circumstances necessitating the need for an intraday margin call and the possibility that such engagement would not be possible in a time of market stress, imposing such engagement as an obligation would not be appropriate. However, a CCA generally should consider whether its written policies and procedures provide for engagement with a CCA ahead of applying an intraday margin call, as circumstances permit.

iii. Determinations by CCAs To Collect Intraday Margin

Several commenters addressed the role of discretion in the proposed requirement for a CCA to have the authority and operational capacity to make intraday margin calls as frequently as circumstances warrant, including when risk thresholds specified by the CCA are breached or when the products cleared or markets served display elevated volatility.[102] Specifically, while generally supportive of the proposal, several commenters sought confirmation that a CCA could use discretion when deciding to issue intraday margin calls.[103] These

[94] 17 CFR 240.17ad–22(e)(23)(ii).

[95] 17 CFR 240.17ad–22(e)(23)(iv).

[96] *See* DTC, Disclosure Framework for Covered Clearing Agencies and Financial Market Infrastructure (Mar. 2024), *https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/DTC-Disclosure-Framework-2024-Q1.pdf;* FICC, Disclosure Framework for Covered Clearing Agencies and Financial Market Infrastructure (Mar. 2024), *https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/FICC-Disclosure-Framework-Q1-2024.pdf;* ICE, Disclosure Framework (July 31, 2023), *https://www.ice.com/publicdocs/clear_credit/ICEClearCredit_DisclosureFramework.pdf;* LCH, Comprehensive Disclosure (July 31, 2024), *https://www.lch.com/system/files/media_root/LCH%20SA%20-%20Comprehensive%20Disclosure%20as%20required%20by%20SEC%20Rule%2017Ad-22%28e%29%2823%29_2022%20Q2_2024.pdf;* NSCC, Disclosure Framework for Covered Clearing Agencies and Financial Market Infrastructure (Mar. 2024), *https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/NSCC-Disclosure-Framework-Q1-2024.pdf;* OCC, Disclosure Framework for Financial Market Infrastructures (July 25, 2024), *https://www.theocc.com/getmedia/4664dece-7172-42a5-8f55-5982f358b696/pfmi-disclosures.pdf.*

[97] *See id.*

[98] *See, e.g., https://www.theocc.com/risk-management/margin-methodology*; *https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/GSD-Clearing-Fund-Methodology-Overview.pdf.*

[99] *https://www.dtcc.com/managing-risk/stress-testing-and-liquidity-risk-management/ccfl-public-calculator.*

[100] *See supra* note 80 and accompanying text.

[101] SIFMA at 9. This commenter also suggested that the Commission should require that a CCA provide the Commission (and to the extent possible, its clearing participants) with an explanation for any discretionary intraday margin calls. *Id.* at 10.

[102] *See* DTCC; ICE; OCC; CCP12.

[103] DTCC at 4 (requesting additional clarity regarding a CCA's discretion and flexibility and stating that a CCA must maintain the discretion and flexibility to determine if intraday margin calls are required based on the totality of all circumstances the CCA may consider relevant and appropriate); ICE at 2 (stating that a CCA should be allowed the discretion on when and how to use its authority to make intraday margin calls under the particular circumstances); OCC at 4 (seeking explicit confirmation that a CCA may ''exercise judgment when determining whether and when to actually make intraday margin calls, based on all relevant circumstances and using predefined criteria);

commenters stated that such discretion was necessary to allow the CCA to consider the potential procyclical impacts of an intraday margin call and/or any financial stability impacts.[104] In this context, procyclicality refers to ''changes in risk-management practices that are positively correlated with market, business, or credit cycle fluctuations and cause or exacerbate financial instability.'' [105] For example, margin calls during periods of declining asset prices may cause participants to sell assets, putting further negative pressure on asset prices and the market.[106] Such events could negatively affect other CCA participants, as well as other CCAs and their markets.[107]

As discussed above, a CCA's margin methodology includes the criteria that a CCA uses to determine whether to make intraday margin calls.[108] Because a CCA's margin methodology constitutes aspects of the CCA's stated policies, practices, or interpretations under Rule 19b–4, a CCA is required to file a proposed rule change when the CCA revises its margin methodology (including, for example, revisions related to how its risk management concerns may affect a CCA's determination to issue an intraday margin call).[109] In such a filing, the CCA would describe how any such revisions are consistent with the requirements of Exchange Act and the rules thereunder, including Rule 17Ad–22(e)(6).

The Commission agrees with these commenters that a CCA's policies and procedures regarding intraday margin generally should be, under Rule 17Ad–22(e)(6)(ii), reasonably designed to address such risk management concerns, such as procyclicality. The Commission confirms that a CCA's consideration of such concerns (and more generally, of a CCA's understanding of its participants' activity and overall market conditions) in its policies and procedures regarding intraday margin (including a CCA's decision to collect or not collect margin in response to such consideration) is permissible and consistent with the requirements of both preexisting Rule 17Ad–22(e)(6)(ii) and the amendments being adopted in this release. The requirement to adopt policies and procedures that include the authority and operational capacity to make intraday margin calls as frequently as circumstances warrant, including when risk thresholds specified by the CCA are breached or when the products cleared or markets served display elevated volatility,[110] should ensure that a CCA establishes the criteria and thresholds that it would consider when determining whether to make an intraday margin call. Such criteria are subject to the transparency and disclosure requirements discussed above in Part II.A.2.b.ii, and as an SRO, a CCA is obligated to follow its own rules. But the CCA's criteria and thresholds are not required to be inflexible or self-executing. A CCA generally should consider how its policies and procedures specify what factors the CCA would consider when determining when to make an intraday margin call when thresholds are breached or there is elevated volatility.[111]

The Commission is adopting this requirement as proposed.[112] A CCA's determination to issue intraday margin calls, consistent with its *ex ante* policies and procedures, should improve risk management outcomes by enabling a CCA to apply its risk management expertise to changing intraday circumstances, such as the extreme price volatility or significant position changes recently experienced in January 2021.[113] A CCA should be better positioned to respond to a market event more effectively by developing policies and procedures that provide a clear framework for the timing and collection of intraday margin, but that also allows for the CCA to use its expertise (in specific products and markets) to analyze the particular facts and circumstances related to the market event and the affected market participants.

Commenters observed the importance of avoiding procyclicality in margin calls generally and the importance of considering the impact an intraday margin call may have on a CCA's participant.[114] The Commission agrees that a CCA generally should consider these issues when determining whether to issue an intraday margin call, consistent with the applicable regulatory requirement to consider, and produce margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, and to calculate margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default.[115]

Therefore, in this analysis, a CCA generally should consider, consistent with its policies and procedures, how its approach to intraday margin aligns with broader systemic objectives, such as minimizing potential procyclical effects and avoiding liquidity drains on

CCP12 at 2 (supporting the proposed approach to intraday margin, but also stating that a CCA needs the ability to exercise discretion when issuing intraday margin calls, including the ability to tailor [its] intraday margin call processes to the characteristics of the market it clears (*e.g.,* market structure)); *see also* Davidson at 11. *But see id.* at 9 (explaining that a CCA would only have an ''occasional need'' for an unscheduled intraday margin call'' for only ''truly extreme market moves''); and 10 (warning that unfettered issuances of intraday margin calls could become ''liquidity sinks'' and ''absorb[ ] liquidity like a giant sponge'').

[104] DTCC at 4 (stating discretion is necessary when considering issuing an intraday market call to consider various factors, such as persistent exposure to a participant during normal market conditions, general market conditions, and any possible procyclical effects a margin collection may trigger); ICE at 2 (stating that discretion is needed for a CCA to consider the procyclical effects of any possible intraday margin call, such as ''exacerbating credit and liquidity concerns with clearing members,'' or ''in extreme cases[,] causing market participant defaults); OCC at 4 (stating that, among other things, a CCA's discretion should include considerations related to anti-procyclicality (by maximizing predictability of liquidity demands) and financial market stability); CCP12 at 2 (stating that this discretion would allow a CCA to consider any potential intraday margin call's ''negative procyclical effects'' and/or ''impacts to the stability of the financial system'').

[105] PFMI, *supra* note 9, at 47; *see also* Committee on the Global Financial System, *The role of margin requirements and haircuts in procyclicality* (Mar. 23, 2010) at 8 (defining procyclicality as ''the mutually reinforcing interactions between the financial and real sectors of the economy that tend to amplify business cycle fluctuations and cause or exacerbate financial instability''), *https://www.bis.org/publ/cgfs36.pdf*.

[106] *See infra* Part IV.C.2.a (discussing the relationship between procyclicality and intraday margin calls).

[107] *Id.*

[108] *See supra* note 83 and accompanying text.

[109] *Id.*

[110] *See supra* Part II.A.2.ii (discussing elevated volatility under Rule 17Ad–22(e)(6)(ii) as when a CCA considers volatility to be elevated above typical levels in a manner specific to the products cleared and the markets served); *contra* CCA Standards Adopting Release, *supra* note 5, at 70815 (stating that what would constitute ''high volatility [. . .] may vary across asset classes'').

[111] As discussed above, *supra* note 101, one commenter sought for the Commission to require disclosure to the Commission and, if practicable, a CCA's participants, of the explanation for any ''discretionary'' intraday margin calls. SIFMA at 10. However, such disclosure is not necessary because these policies and procedures should clearly indicate when the CCA would make an intraday margin call. By contrast, the Commission is requiring that a CCA document when it determines *not* to make an intraday margin call when its policies and procedures would otherwise indicate as such. *See infra* note 118 and accompanying text.

[112] The Commission is making several clarifying changes to Rule 17Ad–22(e)(6)(ii)(C): (1) capitalizing the first word of the rule text to read ''Monitors''; (2) adding after the word ''including'' the language ''in the following circumstances'', followed by a semi-colon; (3) adding (1) and (2) to separate the two circumstances described in the rule text; and (4) adding the word ''and'' following the text of the rule.

[113] *See supra* note 17 and accompanying text (further discussing the response to heightened volatility in GME and other equity securities).

[114] SIFMA at 8–9.

[115] 17 CFR 240.17ad–22(e)(6)(i), (iii).

its participants. For example, a CCA may choose not to issue an intraday margin call triggered by the thresholds set forth in its policies and procedures (*i.e.,* when risk thresholds specified by the CCA are breached or when the products cleared or markets served display elevated volatility) if, in the CCA's judgment, the intraday call is not required to effectively manage the risks posed to the CCA. A CCA's decision not to issue an intraday margin call could, therefore, avoid unnecessarily worsening market conditions by fostering procyclicality, and drawing on its members' capital more than needed (*i.e.,* avoiding ''liquidity sinks'').[116]

A commenter also stated that the Commission should require that a CCA provide to the Commission, and to the extent possible, its clearing members, an explanation of the reasons for discretionary intraday margin calls because such explanation would allow for an evaluation of whether the need to make such a call might have been averted by improved procedures.[117] The Commission does not agree that, as the commenter suggests, an obligation to provide an explanation and disclosure is necessary when a CCA makes an intraday margin call, because its policies and procedures already must identify and document the circumstances in which such a call would be made. However, a CCA should be subject to an obligation to document when it, consistent with its policies and procedures, determines not to make an intraday margin call in circumstances identified in such policies and procedures. A requirement to document when a CCA determines not to make such an intraday margin call, pursuant to its written policies and procedures, is broadly consistent with the goal identified by the commenter: that the CCA should be able to evaluate the implementation of its policies and procedures with respect to intraday margin. By keeping a record of such instances in which a CCA determines not to make an intraday margin call, pursuant to its written policies and procedures, it should be easier for a CCA to review its determination not to make an intraday margin call and to determine whether a breach of the thresholds that triggered an intraday call could have been averted by changed procedures. It also should better allow the CCA to holistically consider the procyclical impacts of intraday margin calls, which, as commenters stated, should be considered as part of a CCA's analysis about such calls.

Therefore, the Commission is further amending Rule 17Ad–22(e)(6)(ii) to add paragraph (e)(6)(ii)(D) to require that a CCA's risk-based margin system ''[d]ocuments when the covered clearing agency determines not to make an intraday margin call pursuant to its written policies and procedures required under paragraph (e)(6)(ii)(C)''.[118]

A CCA generally should review, on a regular basis, any documentation created pursuant to this requirement of Rule 17Ad–22(e)(6)(ii)(D). Such documentation can be used to identify the CCA's rationale for not making an intraday margin call. In addition, a CCA generally should consider whether (and how) to disclose the information required under this documentation requirement to its participants, to provide additional transparency to its participants about when a CCA chooses not to make intraday margin calls, including whether such disclosure is necessary pursuant to Rule 17Ad–25(j), which requires that the CCA establish, implement, maintain, and enforce written policies and procedures reasonably designed to require the board of directors to solicit, consider, and document its consideration of the views of participants and other relevant stakeholders of the registered clearing agency regarding material developments in its risk management and operations on a recurring basis.[119] Consistent with this obligation under Rule 17Ad–25(j), a CCA generally should consider how best to solicit the views of participants and other relevant stakeholders regarding intraday margin calls, which could include how they were applied in the past by the CCA.

c. Other Comments

The Commission proposed requirements related to monitoring for intraday exposure and providing further specificity as to the circumstances when an intraday margin call could be made. However, one commenter addressed three additional issues related to more granular details within the calculation of an intraday margin call. First, this commenter addressed the nature of an intraday margin call, stating that any margin determination, including any intraday determination, should be made with respect to a clearing member's current positions and the current value of those positions, to the extent practicable.[120] A CCA generally should determine margin based on its participants' positions, including a participant's total portfolio (that is, not just positions at end of day or intraday).[121]

Second, this commenter also requested that a CCA net against each other any amounts owing to a clearing member from, on the one hand, initial margin and, on the other hand, variation margin.[122] Third, this commenter also requested that intraday margin calls be bidirectional to return margin cash or collateral to a CCA's participants.[123]

In response to these points, the Commission reiterates that the circumstances that could give rise to intraday margin calls at a CCA may vary significantly (*e.g.,* intraday volatility, large changes in participant positions), and may present varied challenges. Accordingly, although there may be circumstances where it would be appropriate for a CCA to take the approach suggested by the commenter, the Commission's approach to Rule 17Ad–22(e) is to provide flexibility to CCAs, subject to their obligations and responsibilities as SROs under the Exchange Act, to design and structure their policies and procedures to take into account the differences among clearing agencies and the markets and products it clears. Accordingly, the Commission is not adopting any requirements in response to this commenter.

This commenter also stated that the establishment of intraday margin

[116] *See infra* notes 559–563 and accompanying text (further discussing the economic impact of procyclical margin calls and considerations that a CCA may undertake in evaluating when to make or not make a call).

[117] SIFMA at 9, 10.

[118] *See supra* note 111.

[119] 17 CFR 240.17ad–25(j).

[120] SIFMA at 9. The Commission understands this commenter to be referring to the difference between initial margin, which is typically collected to cover potential changes in the value of each participant's position (that is, potential future exposure) over the appropriate close-out period in the event that the participant defaults, as compared to variation margin, which is collected and paid out to reflect current exposures resulting from actual changes in market prices and is typically calculated by marking open positions to current market prices. *See, e.g.,* PFMI, *supra* note 9, at 51. The commenter stated that an intraday call should clearly separate the initial margin and variation margin components of such a call. SIFMA at 9.

[121] *See, e.g.,* CPMI–IOSCO Resilience Guidance, *supra* note 14, sec. 5.2.22 (''A CCP faces the risk that its exposure to its participants can change rapidly as a result of intraday changes in prices, positions, or both; ie adverse price movements, as well as participants building larger positions through new trading (and settlement of maturing trades). For the purposes of addressing these and other forms of risk that may arise intraday, a CCP should address and monitor on an ongoing basis how such risks affect all components of its margin system . . .'').

[122] SIFMA at 9.

[123] *Id.* at 7–8, 10; Davidson at 2, 11 (stating that such a bidirectional flow would allow the participants to avoid ''unnecessary liquidity timing gaps''); *see also* The Associations at 2 (requesting prompt return of margin to clearing members and clients to alleviate liquidity constraints).

procedures cannot be viewed separately from the establishment of margin procedures as a whole, and that the reduction of ''surprises'' with respect to intraday margin depends on having transparent margin procedures generally and on having the start of day margin be as near correct as possible (meaning that the margin collected at the established start of day time period, as opposed to an intraday margin call, should be as accurate as possible).[124] The commenter provided several suggestions regarding the calculation of margin more generally.[125] The Commission proposed requirements related to monitoring for intraday exposure and providing further specificity as to when the CCA must consider an intraday margin call. The suggestions provided by the commenter relate to granular details within the calculation of margin. Rule 17Ad–22(e)(6) already contains requirements related to these issues raised by the commenter, most notably, that the CCA's risk-based margin system must consider, and produce margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, and calculate margin sufficient to cover its potential future exposure to participants between the last margin collection and the close out of positions following a participant default, and use an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products.[126] Although there may be circumstances where it would be appropriate for a CCA to incorporate policies and procedures such as those suggested by the commenter, the Commission's approach to Rule 17Ad–22(e) is to provide flexibility to CCAs, subject to their obligations and responsibilities as SROs under the Exchange Act, to design and structure their policies and procedures to take into account each clearing agency's unique characteristics. In addition, the transparency requirements discussed in Part II.A.2.b.ii apply to all components of a CCA's margin model, including those discussed by the commenter.

One commenter recommended that the Commission require a CCA to disclose particular aspects of its risk models used in the calculation of initial margin.[127] As discussed *supra* in Part II.A.2.b.ii, CCAs are already required to provide disclosure of key aspects of their margin models under Exchange Act Rule 17Ad–22(e)(23)(iv) and to file their rules as part of the SRO and/or SIFMU rule filing processes, which further provides transparency.[128] Therefore, additional disclosure requirements are not required because of the current requirements that a CCA must disclose key aspects of its margin model.

Another commenter stated that a CCA should be required to publish regular statistics in a consistent format as to the performance of margin requirements, including how many clearing members were subject to margin calls of what size, did clearing members go into a margin deficit, and how frequently.[129] However, CCAs already include, as part of their public disclosures under Rule 17Ad–22(e)(23)(iv)(C), a description of basic data and performance statistics on their services and operations, such as basic volume and value statistics by product type, average aggregate intraday exposures to its participants, and statistics on the CCA's operational reliability.[130] As such, the Commission is not adopting any additional disclosure requirements. However, CCAs generally provide such public information regarding their margin models' performance as part of their periodic disclosures.[131] For example, these disclosures include, with respect to margin, identification of the number of times over the past 12 months that margin coverage held against any account fell below the actual mark-to-market exposure of that member account based on daily backtesting results and, in the event of a breach of initial margin coverage, a report on the size of the uncovered exposure, both of which are data points consistent with the commenter's request to identify whether clearing members went into a margin deficit and how frequently.[132] Accordingly, the Commission is not adopting additional requirements. However, a CCA generally should consider what disclosures regarding its policies and procedures for margin collection can be useful to market participants to facilitate their understanding of the performance of its margin model.

B. Inputs to Margin System

1. Proposed Amendment to Rule 17Ad–22(e)(6)(iv)

In the RWP Proposing Release, the Commission proposed to amend Rule 17Ad–22(e)(6)(iv) to strengthen its requirements that a CCA have policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, among other things, uses reliable sources for its price data and uses procedures for addressing circumstances in which price data are not readily available or reliable.[133] Specifically, the Commission proposed expanding the rule's scope beyond price data to also include other substantive inputs to a CCA's risk-based margin system,[134] meaning that the CCA's procedures would also have to address when such a substantive input is not readily available or reliable.[135] The unavailability or unreliability of any substantive input to a CCA's margin system could potentially affect the CCA's ability to calculate margin.[136] Citing as justification the current requirement of ''reliable sources'' of price data,[137] the Commission stated that there is a need to use reliable sources for substantive inputs other than price data.[138] In response, the Commission proposed to expand this requirement to substantive inputs other than price data.[139] The Commission stated that this proposal ''should help ensure that the CCA can continue to calculate and collect margin'' pursuant to its obligations under Rule 17Ad–22(e)(6).[140]

The Commission also proposed two new requirements on a CCA's backup procedures when price data and other

[124] SIFMA at 7.

[125] *Id.* at 7–8 (discussing the development and maintenance of margin models; accurate, robust pricing; margin period of risk; calibration scenarios/lookback periods; margin add-ons, such as concentration and liquidity risks; offsets; anti-procyclicality measures; margin returns; and interoperability).

[126] 17 CFR 240.17ad–22(e)(6)(i), (iii), (v).

[127] The Associations at 3.

[128] 17 CFR 240.17ad–22(e)(23)(iv).

[129] SIFMA at 10.

[130] *See supra* note 96 and accompanying text.

[131] *Id.*

[132] *See, e.g.,* DTCC, ''Fixed Income Clearing Corporation and National Securities Clearing Corporation Public Quantitative Disclosures for Central Counterparties: Q2 2024'' (Aug. 29, 2024) at 13, *https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/CPMI-IOSCO-Public-Quantitative-Disclosures-Q2-2024.pdf.*

[133] RWP Proposing Release, *supra* note 18, at 34713.

[134] *See id.* at 34715 (stating that ''substantive'' refers to ''any inputs used by the covered clearing agency that are necessary for the risk-based margin system to calculate margin'').

[135] *Id.* at 34714.

[136] *Id.*

[137] *Id.* (explaining that a reliable source of timely price data was necessary because a CCA's ''margin system needs such data to operate with a high degree of accuracy and reliability, given the risks that the CCA's size, operation, and importance pose to U.S. securities markets'').

[138] *Id.*

[139] *Id.* at 34714–15 (''The Commission is therefore proposing to amend Rule 17Ad–22(e)(6)(iv) to expand its scope beyond price data to encompass other substantive inputs to its risk-based margin system and to impose requirements on a [CCA] to have procedures when such substantive inputs are not readily available or reliable'').

[140] *Id.* at 34714.

substantive inputs are not readily available or reliable. First, the Commission proposed these procedures to help ensure that the CCA can meet its obligations under Rule 17Ad–22(e)(6).[141] Second, the Commission proposed that these procedures must include either: (i) the use of price data or other substantive input from an alternate source; or (ii) the use of an alternate risk-based margin system that does not similarly rely on the same unavailable or unreliable substantive input.[142]

In proposing this amendment, the Commission included the following guidance: an alternate source ''generally should meet the same level of reliability of the primary source;'' and an ''alternate risk-based system needs to be an alternate margin model that does not rely on the same data source that is unavailable or unreliable'' to ensure to compliance with Rule 17Ad–22(e)(6).[143] The Commission also stated that an alternate risk-based margin system would be subject to the requirements of 17 CFR 240.17ad–22(e)(6)(vi) and (vii), with respect to monitoring, review, testing, verification, and model validation.[144] Additionally, the Commission stated that a CCA should ''consider its reliance on any third party sources for purposes of its risk-based margin system and consider whether an alternate system or source of data or other inputs that is internal to the CCA, and does not rely upon any third party provider, would be appropriate.'' [145]

The Commission is adopting the requirement as proposed, with minor modifications discussed in Part II.B.2 below. The Commission is also making clarifying technical changes.[146]

[141] *Id.* at 34715.

[142] *Id.*

[143] *Id.*

[144] *Id.*

[145] *Id.*

[146] Specifically, the Commission is: (1) adding paragraph markers (in the form of capital letters) to separate the clauses of the rule text into (A), (B), and (C); (2) changing the punctuation from a comma to a semi-colon and deleting the word ''and'' at the end of paragraph (e)(6)(iv)(A); (2) adding parenthesis around the text ''and, with respect to price data, sound valuation models'', deleting the comma at the end of that language, and changing the period to a semi-colon at the end of paragraph (e)(6)(iv)(B); (3) adding additional paragraph markers (*1*) and (*2*) to paragraph (e)(6)(iv)(C) before each of the two alternatives listed in this paragraph (*i.e.,* ''the use of price data or substantive inputs from an alternate source; or'' and ''if it does not use an alternate source, the use of a risk-based margin system that does not rely on the unavailable or unreliable substantive input;'') and capitalizing the first word in each new paragraphs (e)(6)(iv)(C)(*1*) and (*2*) (''The'' and ''If'', respectively); (4) adding a clarifying, internal cross-reference (''such procedures under paragraph (e)(6)(iv)(B)'') in paragraph (e)(6)(iv)(C); and (5) replacing the word ''shall'' in new Rule 17Ad–22(e)(6)(iv)(C) (*i.e.,* ''Such procedure under paragraph (e)(6)(iv)(B) of this section *shall*'') with ''must'' to use more plain language.

2. Discussion of Comments

a. Inclusion and Definition of Substantive Inputs

As discussed above, the Commission proposed expanding the scope of Rule 17Ad–22(e)(6)(iv) beyond price data to also include substantive inputs to a CCA's margin methodology.[147] Based on its supervisory experience, the Commission understands that such substantive inputs could include: (i) portfolio size; (ii) volatility, (iii) sensitivity to various risk factors that are likely to influence security prices; (iv) duration; (v) convexity; and/or (vi) the results of models run by third parties.[148]

Several commenters addressed this proposed modification to Rule 17Ad–22(e)(6)(iv).[149] One commenter agreed generally with the proposed extension of the rule's scope to include ''substantive inputs.'' [150] The commenter supported extending the requirement for ''reliable sources'' to include substantive inputs because a CCA's margin systems need ''to operate with a high degree of accuracy and reliability, given the risk that [its] size, operation, and importance posed to the securities market.'' [151]

Several commenters requested that the Commission provide more guidance regarding its statement about what inputs may be ''substantive.'' [152] One commenter requested that ''the term 'substantive' as used in this context be further refined to avoid confusion over the inputs that are 'necessary' and those that are 'non-consequential.' '' [153] In addition, several commenters stated that the CCA should determine what constitutes a substantive input.[154] One such commenter also stated that, if the Commission prescribed a definition of ''substantive input,'' a CCA may be forced to ''obtain, often at great expense, alternate data sources for inputs with limited utility and minimal or no impact on margin calculations.'' [155]

However, another commenter stated that the Commission's rules around substantive inputs should be principles based, identifying one such principle that ''every input that affects margin requirements by [x]% is deemed substantive.'' [156]

The Commission is not making any amendments to define what constitutes a substantive input. A CCA is responsible for developing its own policies and procedures, including its margin methodology, and it is best positioned to determine what constitutes a substantive input into its margin methodology. As stated in the RWP Proposing Release, ''substantive'' for the purposes of Rule 17Ad–22(e)(6)(iv), ''refers to any inputs used by the CCA that are necessary for the risk-based margin system to calculate margin'' and ''is meant to distinguish from other potential inputs that may not be consequential to the calculation of margin.'' [157] Accordingly, as requested by some commenters, the Commission confirms that a CCA has the discretion to determine what is a ''substantive'' input, based on its knowledge of its risk-based margin system, as compared to those that it determines to be non-consequential.[158] When establishing and maintaining its risk-based margin system, each CCA must have the ability to consider its own unique characteristics and circumstances, as well as those of the market it serves.[159] Rather than have the Commission define the term ''substantive'' prescriptively for each CCA, this discretion corresponds with the Commission's principles-based approach in Rule 17Ad–22(e), which helps each CCA effectively meet the evolving risks and challenges in the markets that each CCA serves.[160] Therefore, no further clarifications or guidance are necessary to distinguish a substantive input from those inputs that are non-consequential.

Further, the Commission is not adopting any amendments to Rule 17Ad–22(e)(6)(iv) to incorporate the principle that ''every input that affects margin requirements by [x]% is deemed substantive.'' [161] This type of requirement would not be principles-

[147] In addition, to improve clarity and consistency of terms, the Commission proposed technical edits standardizing references to ''price data'' in Rule 17Ad–22(e)(6)(iv), which currently refers to both ''price data'' and ''pricing data,'' to refer only to price data. The Commission previously used the two words interchangeably in preexisting Rule 17Ad–22(e)(6)(ii). RWP Proposing Release, *supra* note 18, at 34714 n.59. The Commission received no comments on this proposed technical change of ''pricing data'' to ''price data'' in this provision and is adopting as proposed.

[148] RWP Proposing Release, *supra* note 18, at 34714.

[149] *See* Better Markets at 8–9; CCP12 at 2; DTCC at 5; The Associations at 8.

[150] *See* Better Markets at 8–9.

[151] *Id.* at 8.

[152] *See* DTCC at 5; CCP12 at 2; The Associations at 8.

[153] DTCC at 5.

[154] *Id.;* CCP12 at 2.

[155] CCP12 at 2.

[156] The Associations at 8.

[157] RWP Proposing Release, *supra* note 18, at 34715.

[158] *See* DTCC at 5; CCP12 at 2; The Associations at 8.

[159] *See* CCA Standards Adopting Release, *supra* note 5, at 70800–01.

[160] *See id.* at 70800.

[161] The Associations at 8.

based and instead would prescribe a particular scope of what constitutes ''substantive,'' which the Commission does not seek to do. Based on its supervisory experience, the Commission understands that a wide range of margin models exists among the CCAs. This wide range of margin models exists due to each CCA's different participants, different products cleared, and different markets served. Given these distinctions among the CCAs, and consistent with the principles-based approach in Rule 17Ad–22(e) more generally, the Commission believes it would be inappropriate to include in Rule 17Ad–22(e)(6)(iv) a quantitative threshold defining those inputs that would be ''substantive.'' Such a specific percentage threshold likely would fail to identify all the inputs for all CCAs' margin models that are necessary to ensure every CCA's margin model can meet the requirements of Rule 17Ad–22(e)(6) (*i.e.,* covering its credit exposures to its participants). Therefore, the Commission is not adopting modifications responsive to the commenter requesting ''substantive'' to correspond to a percentage impact on margin requirements.

b. Use of an Alternate Source or an Alternate Risk-Based Margin System

As proposed, the changes to Rule 17Ad–22(e)(6)(iv) required that the procedures for when price data or substantive inputs are not readily available or reliable must include the use of price data or substantive inputs from an alternate source or, if it does not use an alternate source, the use of an alternate risk-based margin system (that does not similarly rely on the unavailable or unreliable substantive input).[162]

One commenter expressed support for this proposed requirement,[163] and other commenters acknowledged the importance of ensuring that a CCA's risk-based margin system be able to perform even when certain sources of pricing data or other inputs become unavailable.[164]

However, several commenters disagreed with the requirement of a sole means of contingency (that is, the use of alternate sources) and stated that CCAs should have the flexibility to develop their own backup procedures and/or appropriate substitutions for unavailable inputs in their margin models, depending on the products cleared and the markets served.[165] These commenters stated that it may not always be possible to have a ''like-for-like'' substitution of an alternate source.[166] One commenter stated that the Commission should not restrict choices in an emergency situation by requiring that an alternate source be independent of the third-party provider, and that CCAs should simply have a ''credible fallback'' in the event of unavailable price data or substantive inputs.[167] Another such commenter recommended that the proposal be modified to allow for ''substantive inputs from an alternate source, and/or of appropriate alternate inputs.'' [168]

In response to the commenters who sought revisions to the proposed requirement's obligation to use an alternate source, the requirement of an alternate source does not mean that such an alternate source must be external to a CCA or that the alternate source must be of the same nature as the original substantive input (that is, the alternate source need not be a ''like-for-like'' substitute). As stated in the RWP Proposing Release, ''alternate source[s] generally should meet the same level of reliability of the primary source, *whether that alternate is sourced from an external provider or created internally*.'' [169] By acknowledging that an alternate source may be created internally, the Commission recognized that an alternate source means, simply, an alternate to the primary input and does not require an entirely independent, third-party source to provide the same input. Similarly, the recognition that the alternate source may be created internally means that the Commission also recognized that the alternate source may, in fact, be the result of internal policies and procedures that the CCA designs to develop an internal alternate source and meet the needs of its margin methodology.

Further, in response to the commenters seeking flexibility to develop their own backup procedures, this requirement does not prevent a CCA from using its discretion to determine the most appropriate substitution for any price data or substantive input to its risk-based margin system.[170] This requirement also does not preclude the use of policies and procedures that establish a methodology or approach to determine the appropriate price,[171] so long as, as discussed in Part II.B.2.c *infra,* the CCA can still meet the obligations of Rule 17Ad–22(e)(6), including meeting its credit obligations to its participants.[172] Therefore, revisions to or deletion of the rule text regarding alternate sources, including those suggested by one commenter to allow for ''substantive inputs from an alternate source, and/or of appropriate alternate inputs,[173] are not necessary, as the rule text does not require an externally provided alternate source.

One commenter stated that the Commission should ''refocus[ ]'' the final rule on policies and procedures, as opposed to requiring policies and procedures that include an alternate source or risk-based margin system.[174] The Commission agrees that the

[162] RWP Proposing Release, *supra* note 18, at 34715.

[163] Better Markets at 9 (stating that this proposed requirement would ensure that the backup procedures available to a CCA ''are sufficiently distinct from the impaired data source that they will serves as reliable alternatives'').

[164] *See* OCC at 4; ICE at 2; CCP12 at 2.

[165] DTCC at 4 (stating that a CCA should have ''the flexibility to develop reasonable backup procedures and contingency plans for these types of circumstances, which will depend on the cleared products and market structure at issue, and may not in all cases include the use of third-party secondary vendors or data sources''); OCC at 5 (stating that a CCA should be permitted to use its informed judgment to determine the appropriate substitutions for unavailable inputs in its margin system, which would ensure that CCAs have sufficient flexibility to address the need for alternative data sources in a manner that addresses the Commission's policy objectives, is tailored to the markets served and products cleared by the [CCA], and is not unnecessarily burdensome).

[166] DTCC at 4–5 (stating that requiring an alternate source would not always be the most practical or effective means to ensure a CCA meets its participants' credit obligations under Exchange Act Rule 17Ad–22(e)(4), due to the possible absence of an alternate source of pricing data or other substantive inputs (*e.g.,* because of industry consolidation among vendors), and the inability to use discretion to develop a solution to unavailable price data or other substantive input); OCC at 4 (stating that alternate sources may not exist, or may be prohibitively expensive or technically difficult to implement when compared to the impact of the input on the margin model). One such commenter suggested that a CCA may find it appropriate if its policies and procedures incorporated the use of an alternative pricing vendor, where applicable, or in the absence of such an alternative provider, pursuant to the CCA's policies and procedures to ensure that timely pricing data is applied, with such procedures including, for example, recording ''the last available price'' in the CCA's pricing database with such price consumable to applicable participants (citing to its recent update to its Clearing Agencies' Securities Valuation Framework). *Id.* at 5.

[167] The Associations at 9.

[168] OCC at 5.

[169] RWP Proposing Release, *supra* note 18, at 34715 (emphasis added).

[170] *Id.*

[171] For example, one CCA commenter stated that its existing policy provided that backup pricing may more accurately be sourced from an alternative pricing vendor or may also be determined, in the absence of an alternative pricing vendor, pursuant to the CCA's applicable policies and procedures to ensure that timely pricing data is applied, with such procedures including, for example, using the last available price which is consumable to applicable participants. DTCC at 5.

[172] RWP Proposing Release, *supra* note 18, at 34715.

[173] *See* OCC at 5.

[174] CCP12 at 2.

requirement should allow for flexibility in how CCAs address the unavailability or unreliability of an input to their margin model. The requirement being adopted does not mandate that a specific alternate source be used, but rather that the CCAs have policies and procedures to ensure that some alternate source is available, even if that source is determined internally by the CCA.

With respect to the requirement of a potential alternate risk-based margin system, one commenter stated that requiring CCAs to develop and maintain an entire alternate risk-based margin system would be prohibitively expensive and operationally burdensome.[175] However, the Commission disagrees with the commenter's characterization that such costs are necessary because the proposed rule does not require the development and maintenance of a second risk-based margin system separate from its current risk-based margin system, as discussed below.[176] Another commenter suggested that the Commission should remove the requirement of a potential alternate risk-based margin system from the rule text.[177] The Commission disagrees that the proposed rule requires a second risk-based margin system separate from a CCA's current risk-based margin system, and the Commission is modifying the term ''alternate risk-based margin system'' to make this point clear.[178] Specifically, the proposed requirement for backup procedures when substantive inputs ''are not readily available or reliable'' should help a CCA ensure it ''can continue to calculate and collect margin commensurate with, the risks and particular attributes of each relevant product, portfolio, and market, as required under Rule 17Ad–22(e)(6)(i).'' [179]

Similarly, another commenter disagreed with the proposed additional requirement that a CCA have advance plans ''to use an alternate risk-based margin system because of the unavailability or unreliability of a particular input,'' which ''would impose a significant burden on a [CCA] solely for the purpose of addressing a problem with an input that may be transitory.'' [180] The commenter stated that it ''is not aware of circumstances where a [CCA] has been unable to address a problem with an input price through its normal business practices and procedures.'' [181] The commenter also stated that it ''does not believe that the Commission has articulated a problem (other than a theoretical one)'' that the proposal is designed to address and ''has not recognized the considerable costs to'' CCAs, clearing firms, and other market participants ''that would be required to develop and implement alternate margin models to address a remote and theoretical problem with price or other data inputs.'' [182] The commenter suggested that this clause be removed from the rule text.[183] In addition, one commenter requested that the Commission confirm that any final rule does not create an expectation that CCAs should develop an alternate risk-based margin system.[184]

The Commission disagrees with the commenter that the failure of a CCA's margin model (*i.e.,* its risk-based margin system) due to an unavailable or unreliable input is a ''theoretical'' problem. Rather, the unavailability or unreliability of a substantive input could impact a CCA's ability to establish, implement, maintain, and enforce a risk-based margin system that Rule 17Ad–22(e)(6) requires. Moreover, contrary to the commenter's assertion, the Commission is not requiring that CCAs develop and implement alternate margin models, but rather, is requiring that the CCA establish, implement, maintain and enforce written policies and procedures to address particular issues that could affect the functioning of its margin model. The requirement also allows for the use of an alternate source in the existing risk-based margin system, and a CCA may determine the alternate source using its own policies and procedures.[185] An alternate source from a third-party provider is not required. More generally, this requirement is designed to expand the scope of the preexisting rule and ensure that a CCA establishes, implements, maintains and enforces written policies and procedures to address the unavailability of a substantive input to its margin model and meet its obligations under Rule 17Ad–22(e)(6). As stated in the RWP Proposing Release, when substantive inputs are unavailable or unreliable, CCAs must be able to continue to calculate and collect margin commensurate with, the risks and particular attributes of each relevant product, portfolio, and market.[186] Additionally, the Commission analyzed the costs of the requirement in Part IV, *infra,* and in the RWP Proposing Release. Given the analysis, the Commission disagrees with the commenter's suggestion to remove the clause from the proposal.

The Commission is making several technical changes to the rule text to clarify that an alternate risk-based margin system is not required in all instances. Specifically, the Commission deletes the word ''alternate'' from ''an alternate risk-based margin system'' in Rule 17Ad–22(e)(6)(iv)(C)(*2*) (and changes ''an'' to ''a'' before ''risk-based margin system'' for grammatical reasons). This revision responds to commenters' concerns that the rule requires that a CCA develop an alternate risk-based margin system separate from a CCA's current risk-based margin system.[187] The rule does not include such a requirement. The Commission is also adding the term ''either'' after ''must include'' to clarify that satisfying either paragraph (e)(6)(iv)(C)(*1*) or (*2*) fulfills paragraph (e)(6)(iv)(C)'s requirement.[188]

c. Obligation To Meet a CCA's Obligations Under Rule 17Ad–22(e)(6)

The proposed amendment to Rule 17Ad–22(e)(6)(iv) also provided that the procedures discussed in Part II.B.2.b must ensure that the CCA is able to meet its obligation to cover credit exposures to its participants under Rule 17Ad–22(e)(6).[189] In the RWP Proposing Release, the Commission explained that, by specifying how these procedures must perform (*i.e.,* to allow a CCA to continue to cover its credit exposures), this proposed amendment helps ensure that a CCA adopts sufficiently robust procedures.[190] As such, this proposed amendment would, with respect to both

[175] OCC at 5.

[176] *See infra* notes 178 and 186 and accompanying text.

[177] ICE at 2–3.

[178] *See infra* note 187 and accompanying text.

[179] *Id.*

[180] ICE at 2.

[181] *Id.* at 3.

[182] *Id.*

[183] *Id.*

[184] CCP12 at 3 (stating that the development of such an alternate system would require a CCA to effectively maintain two very distinct margin systems, which is likely very resource intensive and time consuming).

[185] RWP Proposing Release, *supra* note 18, at 34715.

[186] *Id.* at 34714.

[187] *See supra* notes 175, 184 and 177 and accompanying text.

[188] The Commission also removes from Rule 17Ad–22(e)(6)(iv)(C) the word ''similarly'' from between the words ''not'' and ''rely'' (*i.e.,* ''the use of a risk-based margin system that does *not rely* on the unavailable or unreliable substantive input'') to remove redundancy (as the word ''similarly'' was unnecessary to convey the meaning that the prohibited reliance was on the unavailable or unreliable substantive input in question). The Commission also revises the reference to ''the unavailable or unreliable substantive input'' to ''substantive inputs that are unavailable or reliable'' for the same reasons.

[189] RWP Proposing Release, *supra* note 18, at 34715.

[190] *Id.*

price data and other substantive inputs, require that such procedures should address circumstances in which price data or substantive inputs are not readily available or reliable, in order to ensure that the CCA be able to meet its requirements under Rule 17Ad–22(e)(6) and cover its credit exposures to its participants.[191]

The Commission received no comments on this requirement and is adopting as proposed.

C. Contents of Recovery and Orderly Wind-Down Plans

The Commission received several overarching comments on proposed Rule 17Ad–26 that were generally supportive of the approach, particularly the addition of new and more specific requirements applicable to a CCA's RWP. One commenter stated that a detailed RWP is essential, as the inability of a CCA to recover from severe losses, or the disorderly wind-down of a CCA, could have significant repercussions not only for the sector in which the CCA operates but for the markets and the economy as a whole.[192] The commenter also stated that CCAs must have comprehensive RWPs because even sound risk management may not prevent a CCA's default in extreme circumstances.[193] The commenter continued by stating the obvious strength of recovery and orderly wind-down planning is the *ex ante* development of a strategy to maintain as a going concern the critical operations of the CCA, even in the face of losses that would otherwise have caused its insolvency, or to ensure the orderly transfer of functions.[194] The commenter stated that not aligning RWPs to uniform requirements introduces risk, and that the proposed rule mitigates that risk by requiring all RWPs to incorporate at least nine specific elements.[195] Another commenter explained that CCAs face no meaningful competitive pressure when they are the sole clearing agency for the products they clear and can be a source of systemic risk.[196] The commenter stated that, in such cases, to improve CCAs, regulatory mandates must effectively codify existing best practices to enhance resiliency and create a level playing field for resiliency, and that such improvements will only occur if the Commission imposes specific regulatory requirements.[197]

One commenter cautioned that the proposed upgrades and focus on RWP design and testing may create unrealistic expectations and over-reliance on RWPs. The commenter also stated that care is needed to ensure that confidence in such plans is well grounded and that the efficient implementation of RWPs is properly stressed, accounting for rapidly evolving market risk and for the ever-increasing speed of market-moving data.[198] In the Commission's view, effective planning can help preserve financial stability and ensure the continuity of critical CCP and CSD functions for the markets served by CCAs, and the availability of tools and resources in the RWP generally reserved for recovery and wind-down scenarios would not lead to an ''over-reliance'' on such tools in practice. In practical terms, default management, recovery, and wind-down exist as distinct points across a spectrum from normal market conditions to highly stressed market conditions. As such, a CCA would deploy its RWP either (i) in a default scenario, only after its business-as-usual default management tools had failed to close out any defaulting portfolios and, likely, after the CCA had fully exhausted its prefunded resources, or (ii) in a non-default scenario, after resources set aside for business risk (*e.g.,* six months of operating expenses) or for other purposes had been exhausted. Commission rules impose a high standard for resilience in normal and stressed market conditions across both default and non-default loss scenarios, consistent with the international standards set forth in the PFMI, of which planning for recovery and orderly wind-down is but one part of a multi-part and comprehensive regulatory framework. Given this dynamic, CCAs would not have incentives to ''activate'' their RWPs early.

More generally, the Commission agrees with commenters expressing the view that thoughtful recovery and wind-down planning is necessary, even when effective risk-management measures are in place, because of the potential systemic risk implications of the failure of a CCA. Given the evolving nature of recovery and orderly wind-down planning, as well as the annual review and testing requirements included in Rule 17Ad–26, the concern that adding more robust requirements for development and testing of RWPs will lead to ''over-reliance'' on RWPs is misplaced. Effective RWPs, with robust consideration of scenarios, triggers, and processes for testing and board approval, help promote recovery. Such planning for recovery is essential because, as other commenters have stated, the wind-down of systemic functions often would not leave alternative providers of clearance and settlement services to support continued market function.[199] To reach the stage where a CCA would consider implementing its RWP, in the context of a default loss, the CCA would have to incur default losses greater than the financial resources maintained pursuant to policies and procedures required by Rule 17Ad–22(e)(4),[200] or in a non-default loss context, incur losses greater than the liquid net assets funded by equity held pursuant to the policies and procedures required by Rule 17Ad–22(e)(15)(ii) to cover potential business losses.[201] As such, neither CCAs nor market participants are in danger of ''over-reliance'' on the policies and procedures that undergird RWPs. In addition, although many systemic functions are not currently offered by alternative providers, RWPs can, in establishing robust policies and procedures for orderly wind-down, help facilitate the orderly transfer of systemic functions to a new entity to maintain clearance and settlement services for the market served.

[191] *Id.*

[192] Better Markets at 10.

[193] *Id.*

[194] *Id.*

[195] *Id.*

[196] SIFMA at 10–11.

[197] *Id.*

[198] Letter from Erkki Liikanen, Co-Chair, and Simon Johnson, Co-Chair, CFA Institute Systemic Risk Council (Aug. 30, 2023) (''CFA'') at 5.

[199] *See, e.g.,* Davidson at 1. This concern regarding the feasibility or advisability of wind-down in the context of CCAs is discussed further in Part II.D.1.c.

[200] *See* 17 CFR 240.17ad–22(e)(4)(i) (requiring a CCA to maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence); *see also* 17 CFR 240.17ad–22(e)(4)(ii) (requiring a CCA that provides CCP services and is either systemically important in multiple jurisdictions or a clearing agency involved in activities with a more complex risk profile to maintain additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for the CCA in extreme but plausible market conditions); 17 CFR 240.17ad–22(e)(4)(iii) (requiring a CCA that is not subject to Rule 17Ad–22(e)(4)(ii) to maintain additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the participant family that would potentially cause the largest aggregate credit exposure for the CCA in extreme but plausible market conditions).

[201] *See* 17 CFR 240.17ad–22(e)(15)(ii) (requiring a CCA, at a minimum, to hold liquid net assets funded by equity equal to the greater of either six months of the CCA's current operating expenses, or the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of the CCA).

Another commenter stated that the RWP Proposing Release has not met the burden of proof required by the Administrative Procedure Act. More specifically, the commenter stated that the Commission has not demonstrated that the rule amendments are necessary or in the public interest because the proposed amendments are to existing rules that already more than adequately cover the areas in question, and there have been no examples of CCAs or clearing agency participants that failed or of CCAs that executed recovery plans or parts thereof. [202] The commenter further explains that the existing SRO rules of the CCAs relating to RWPs have been approved by the Commission, and that the Commission has conducted multiple examinations of CCAs under those rules, where any deficiencies found have been subject to, or are in the process of, review and remediation.

Although rare, CCPs both in the U.S. and abroad have experienced highly stressed market conditions that led to participant defaults, and CCP failures have occurred outside the U.S. Examples of such participant defaults include three CCP failures in other jurisdictions in recent history, as well as the market stress that CCPs faced in response to the 1987 market break and in response to the beginning of the COVID–19 pandemic in 2020.[203] These defaults and failures could happen again and underscore the importance of the Commission's ongoing efforts to ensure effective supervision and regulation of CCAs following the enactment of the Dodd-Frank Act, as discussed in Part I.[204] These examples also reinforce the possibility that even a robust and resilient CCA holding a sizeable pool of prefunded resources and other liquid resources may experience stressed market conditions or other events so extreme that the resources it has reserved for potential loss scenarios will prove insufficient, potentially necessitating actions beyond ''business-as-usual'' default management. By establishing requirements related to core services and service providers, the identification of scenarios, triggers, and tools for recovery and orderly wind-down, and robust processes for implementation, notification, testing and board review and approval, new Rule 17Ad–26 helps ensure that CCAs can successfully plan for, and navigate highly stressed or extreme market conditions, where events may occur or conditions deteriorate rapidly.[205]

Pursuant to the Exchange Act, the Commission is directed to facilitate the ongoing development of the national system for clearance and settlement, which includes ensuring effective risk management at CCAs. As discussed throughout the RWP Proposing Release, and in this release, the Commission has proposed and is now adopting new Rule 17Ad–26 to codify certain elements that have emerged across some RWPs that must be included in all RWPs to help ensure a CCA can effectively allocate uncovered losses, manage liquidity shortfalls, and address capital shortfalls arising from other causes. As such, new Rule 17Ad–26 sets forth these elements. While existing RWPs at CCAs may contain several of these elements, new Rule 17Ad–26 requires each CCA to have every element in its RWP. As previously discussed,[206] new Rule 17Ad–26 also promotes three important objectives consistent with its statutory mandates: (i) bolstering the existing RWPs at CCAs; (ii) codifying some existing RWP elements to ensure that these elements remain in the plans over time; and (iii) establishing that the RWP of any new CCA would contain each of the elements specified in the rule. In so doing, the Commission is establishing a higher minimum standard for the quality and effectiveness of RWPs, designed to help ensure that planning for recovery and orderly wind-down is effective and can promote financial stability in periods of market stress. The Commission will continue to review rule filings and advance notices submitted by CCAs under the rules adopted in this release to help ensure the regulatory framework is an effective tool that can advance the evolving process of recovery and resolution planning for CCPs and other CCAs.

Below the Commission addresses comments regarding specific elements of proposed Rule 17Ad–26.[207]

1. Core Services: Rule 17Ad–26(a)(1)

Proposed Rule 17Ad–26(a)(1) required a CCA to identify and describe in its RWP the CCA's critical payment, clearing, and settlement services and address how the CCA would continue to provide such critical services in the event of a recovery and during an orderly wind-down, including the identification of the staffing necessary to support such critical services and analysis of how such staffing would continue in the event of a recovery and during an orderly wind-down.

In the RWP Proposing Release, the Commission explained that the first step in effective recovery and orderly wind-down planning must be identification of the critical services provided to market participants because market participants rely on these services to facilitate payment, clearing, and settlement in the U.S. securities markets. The Commission also stated that such planning helps ensure that RWPs focus on a CCA's ability to provide these services on an ongoing basis, even under stress.[208] Furthermore, the Commission stated its belief that the CCA generally should consider the impact that any interruption to particular services would have on the CCA's participants and the smooth functioning of the market it serves, as well as whether the service is available from any substitute provider. In the proposed rule, ''critical'' referred to the importance of the service to participants and to the proper functioning of the markets, where an inability to provide the service would implicate financial stability concerns. As such, the Commission also proposed definitions of ''recovery'' and ''orderly wind-down'' focused on the need to continue to provide the critical payment, clearance, and settlement services provided by a CCA through the recovery or wind-down event.[209]

Several commenters generally supported the requirement to identify the critical payment, clearance, and settlement services provided by a CCA and address how the CCA would continue to provide such critical services.[210]

[202] Davidson at 1–3.

[203] *See, e.g.,* Staff Report on the Regulation of Clearing Agencies (Oct. 1, 2020) at 18, n.93, *https://www.sec.gov/files/regulation-clearing-agencies-100120.pdf* (describing recent examples of participant defaults); Bank for International Settlements (''BIS''), *CCP Failure: A Rare but Present Danger* (Dec. 16, 2018), *https://www.bis.org/publ/qtrpdf/r_qt1812z.htm* (describing three CCP failures over the last 50 years); ''The October 1987 Market Break, A Report by the Division of Market Regulation'' (Feb. 1988), *https://www.sechistorical.org/collection/papers/1980/1988_0201_MarketBreak_01.pdf* (describing the market stress associated with the 1987 market crash and the stress it placed on CCPs at the time).

[204] *See supra* Part I and notes 5–13, 23–40, and accompanying text (discussing the rationale for the proposed rules and the statutory authority for the regulation of clearing agencies).

[205] *See* RWP Proposing Release, *supra* note 18, at 34709.

[206] *See supra* note 39 and accompanying text.

[207] The Commission is making one technical edit to the preamble language for Rule 17Ad–26, replacing ''shall'' with ''must'' to use more plain language, as well as align with the approaches in other recently adopted rules for clearing agencies at 17 CFR 240.17ad–25 and 240.17ad–27.

[208] RWP Proposing Release, *supra* note 18, at 34718.

[209] *See* proposed Rule 17Ad–26(b).

[210] *See* SIFMA at 14 (''strongly supports the requirement that Clearing Agencies ensure that they are able to maintain access to services''); ICE at 3 (''supports the requirement to identify critical payment, clearing, and settlement services and to address continued use of such services during a

a. Replacing ''Critical'' With ''Core''

The Commission is modifying the final rule to refer to ''core payment, clearance, and settlement services'' rather than ''critical payment, clearance, and settlement services'' (hereinafter, referred to as ''core services'') to improve clarity and consistency with terminology in other rules, such as Rule 17Ad–25(i),[211] which concerns the governance of ''service providers for core services.'' Furthermore, the use of ''core'' as opposed to ''critical'' helps distinguish a CCA's obligations under Rule 17Ad–26 from those under 17 CFR 242.1000 through 242.1007 (''Regulation SCI''), which addresses, in the context of clearing agencies subject to the rule, ''critical systems'' that support clearance and settlement.[212]

Use of the descriptive term ''core'' rather than ''critical'' does not affect the Commission's guidance stated in the RWP Proposing Release on identifying those services.[213] Accordingly, when identifying a core service, the CCA generally should consider the impact that any interruption to a particular service would have on the CCA's participants and the smooth functioning of the markets that it serves, as well as whether the service is available from any substitute provider.[214]

b. Modification to ''Staffing'' Element

Several commenters stated that identifying staffing or staffing resources is a necessary part of addressing how a CCA may continue providing its core services.[215] One of those commenters stated that it is not necessary to identify specific personnel or positions required to be maintained, and a CCA should have flexibility to determine the staff needed in a particular situation, including taking into consideration the availability and willingness of personnel to perform services at the time of a recovery or wind-down.[216] The commenter suggested the proposed rule be amended to clarify that the CCA is not required to identify specific personnel or positions required to be maintained.[217] Similarly, another commenter stated that lists of specific employees may become dated quickly due to a shift in responsibility or normal attrition.[218] Another commenter stated, given the volume of employee turnover and new initiatives, personnel designations likely change with regularity, making specific identification of personnel in the RWP superfluous.[219]

The Commission agrees with the commenters that identifying specific personnel or employees is not necessary in planning and recognizes that changes may occur in the staffing at a CCA. However, it is important for planning purposes to identify those positions, roles, or personnel functions that are necessary for the continuation of core services, regardless of who or how many staff fills the role in ordinary circumstances, to avoid unnecessary disruptions. As such, the Commission is modifying the final rule from the proposal to refer to the identification of ''staffing roles'' instead of ''staffing,'' the latter of which could have been interpreted as requiring the identification of specific individuals.

Several commenters responded to the clause requiring ''analysis of how such staffing would continue in the event of a recovery and during an orderly wind-down.'' One commenter stated that the process for preparing to retain and incentivize critical employees under adverse circumstances is the critical piece of information necessary for the CCA and its supervisory and resolution authorities.[220] The commenter stated that what is most important in this aspect of planning are the retention tools the CCA uses, how it considers retention when setting and negotiating employment terms with essential personnel, and how it tracks the terms of each such employee's employment.[221] The commenter suggested a minor wording change to proposed Rule 17Ad–26(a)(1) to state ''analysis of how the CCA prepares for such staffing to continue in the event of a recovery and during an orderly wind-down.'' [222] Another commenter stated that it is important to have sufficient going concern resources to allow a CCA to retain its key personnel, claiming that the inability to keep personnel from leaving after a prior high profile insolvency event in the 2008 financial crisis contributed to large losses.[223] Another commenter stated that not even the most lucrative employment agreements can be sufficient to retain highly in-demand skilled employees on a ''sinking ship,'' and furthermore stated that certain CCAs have organized labor agreements in place with many employees that would require time consuming renegotiation to satisfy this clause in the proposed rule.[224]

To address the above concerns regarding the potentially unpredictable or evolving circumstances of employment during a recovery or wind-down event, the Commission is modifying the clause related to analyzing the continuation of staffing roles in a recovery and during an orderly wind-down. The clause has been modified in the final rule to state ''analyzing how such staffing roles necessary to support such core services would continue in the event of a recovery and during an orderly wind-down.'' [225] In response to commenters generally focused on concerns that a CCA could not guarantee the circumstances of employment during a recovery or wind-down event, the rule only requires that a CCA conduct an analysis, through which it would be able to identify potential challenges and potential ways to address those challenges. The final rule does not require the CCA to guarantee or compel specific staff or personnel to remain in place. Rather, the requirement promotes preparation for recovery and wind-down events, helping to ensure that from a staffing perspective the necessary roles or functions have been identified and established so that core services can continue uninterrupted. As one commenter stated, there may be organized labor agreements in place with employees. Pursuant to the final rule, to address such circumstances, a CCA is required in its RWP to analyze any such arrangements to see whether and how they might impact staffing during a recovery or an orderly wind-

recovery or wind-down''); OCC at 6 (''agrees that identification of critical services and planning for their continuation in a recovery or orderly wind-down should be the core content of a CCA's RWP'').

[211] 17 CFR 240.17ad–25(i).

[212] *See* 17 CFR 242.1000 (defining ''Critical SCI systems''); *see also* RWP Proposing Release, *supra* note 18, at 34719 (acknowledging there would likely be some connection between what a CCA identifies as its critical services for purposes of inclusion in its RWP and what it identifies as ''critical SCI systems'' for purposes of Regulation SCI, but inclusion of a critical service in a CCA's RWP would have no impact on the CCA's obligations under Regulation SCI).

[213] RWP Proposing Release, *supra* note 18, at 34718.

[214] *Id.*

[215] OCC at 6 (agreeing that any consideration of how a CCA will continue its core services necessarily requires consideration of how to plan to retain the necessary staff for such efforts); ICE at 3 (recognizing that it is necessary to identify staffing resources to implement RWPs); The Associations at 13 (agreeing that emphasis should be placed on determining staffing requirements); SIFMA at 14 (strongly supporting the requirement that CCAs ensure that they are able to maintain access to services, including personnel services, in a default scenario).

[216] ICE at 3.

[217] *Id.*

[218] OCC at 6.

[219] Davidson at 6.

[220] OCC at 6.

[221] *Id.*

[222] *Id.*

[223] SIFMA at 14.

[224] Davidson at 6.

[225] To eliminate extraneous words and align the text grammatically, the Commission has replaced the phrase ''analysis of'' with ''analyze.'' *See infra* note 228 and accompanying text (describing other grammatical changes to the rule text).

down, consistent with the terms of the rule requirement. The rule does not require a CCA to renegotiate such arrangements.

In addition, and separate from the requirements in Rule 17Ad–26(a)(1), a CCA is required by Rule 17Ad–22(e)(15)(ii) to have written policies and procedures to cover potential general business losses by holding liquid net assets funded by equity equal to the greater of either six months of the covered clearing agency's current operating expenses, or the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services of the covered clearing agency.[226] As such, a CCA generally should estimate the potential costs associated with ensuring its core services, which could include the staffing necessary to support those services, to ensure that it can meet the requirements in Rule 17Ad–22(e)(15) related to implementing the recovery or orderly wind-down of critical operations and core services.

One commenter suggested a ''process'' approach to retain employees with an associated wording change in the rule.[227] By focusing on ''roles'' in the final rule, the modified rule text achieves the same result. In addition to the substantive change from ''staffing'' to ''staffing roles necessary to support such core services'' discussed above, the Commission has made technical edits to the rule text to add paragraph markers (i) and (ii), aligning the text grammatically.[228]

2. Service Providers: Rule 17Ad–26(a)(2)

Proposed Rule 17Ad–26(a)(2) required the RWP of a CCA to identify and describe any service providers upon which the CCA relies to provide the services identified in paragraph (a)(1) of proposed Rule 17Ad–26, specify to what services such service providers are relevant and address how the CCA would ensure that such service providers would continue to perform in the event of a recovery and during an orderly wind-down, including consideration of contractual obligations with such service providers and whether those obligations are subject to alteration or termination as a result of initiation of the recovery and orderly wind-down plan.

The Commission, based on its supervisory experience, has observed that CCAs rely upon some service providers to deliver core services.[229] For those service providers that are necessary for the provision of core services, the failure of those service providers to perform could pose significant operational risks and have substantial effects on a CCA's ability to provide core services. In a recovery or wind-down event, the continued performance of such a service provider would be essential for the continuity of core services. Thus, the Commission proposed to require a CCA to identify and describe the subset of its service providers necessary to ensure the continued delivery of core services throughout a recovery or wind-down event.

Final Rule 17Ad–26(a)(2) refers to ''its written agreements'' instead of ''contractual obligations'' for the reasons discussed in the modifications to the definition of ''service provider for core services'' in final Rule 17Ad–26(b) in Part II.D.2, *infra.*[230] The Commission is also making technical changes to Rule 17Ad–26(a)(2) by adding paragraph markers to separate the clauses of the rule text into paragraphs (a)(2)(i) and (ii).

The Commission received comments on proposed Rule 17Ad–26(a)(2) and is making the modifications to the rule discussed below.

a. Identify and Describe Service Providers for Core Services

One commenter, agreeing with the Commission that continued performance of a service provider as part of the RWP would be essential, stated that the requirements of proposed Rule 17Ad–26(a)(2) and the related proposed definition of ''service provider'' in proposed Rule 17Ad–26(b) are circular in nature and overly broad, resulting in too many service providers being captured and the requirement being overly burdensome.[231] Specifically, the commenter stated that the phrases ''. . . upon which the covered clearing agency relies to provide the services identified in paragraph (a)(1) of this section . . .'' in proposed Rule 17Ad–26(a)(2) and ''. . . in any way related to the provision of critical services, as identified by the covered clearing agency in paragraph (a)(1) of this section . . .'' in the definition of ''service provider'' in proposed Rule 17Ad–26(b) are superfluous and unnecessary, and thus, both are not needed.[232] The commenter further stated that by including the term ''in any way'' as well as ''relies'' in these two sections of the proposed rules, the Commission broadened the scope of ''service provider'' to a point that renders the term functionally useless for identifying those service providers that are critical to the business operations of a CCA.[233] By contrast, another commenter stated that the term as used in proposed Rule 17Ad–26(a)(2) appears to limit the subset of providers to be addressed in the RWP.[234]

Commenters differed in their interpretation of these phrases in proposed Rule 17Ad–26(a)(2) and the definition of ''service provider'' in proposed Rule 17Ad–26(b). The phrase ''upon which the covered clearing agency relies to provide the services identified in paragraph (a)(1) of this section'' has been deleted in final Rule 17Ad–26(a)(2) to avoid any duplication of, or inconsistency with, the definition of ''service providers for core services'' in final Rule 17Ad–26(b).[235] Along with the modifications to the definition of ''service provider for core services'' in final Rule 17Ad–26(b) discussed in Part II.D.2 *infra,* the scope of service providers captured is appropriate for recovery and orderly wind-down planning purposes.

b. Ensure Continued Performance of Service Providers for Core Services

One commenter disagrees that CCAs can reasonably ''ensure'' that there will be continuation of services by service providers.[236] The commenter stated that it interprets Rule 17Ad–22(e)(15)(ii) to require a CCA to have sufficient resources to continue to pay service providers through the entirety of an execution of a CCA's RWP, and therefore states that this existing requirement should adequately address

[226] Pursuant to Rule 17Ad–22(e)(15)(iii), these liquid assets are in addition to resources held by the CCA to cover participant defaults or other risks covered by Rules 17Ad–22(e)(4)(i) through (iii), as applicable, and to cover the liquidity risks identified in Rules 17Ad–22(e)(7)(i) and (ii).

[227] OCC at 6.

[228] Specifically, the phrase ''the identification of'' has become ''by: identifying'' and ''analysis of'' has become ''analyzing.'' *See supra* note 225 (describing other grammatical changes to the rule text).

[229] RWP Proposing Release, *supra* note 18, at 34719.

[230] The Commission is also modifying in final Rule 17Ad–26(a)(2) the clause ''and whether those obligations'' to ''and whether the obligations under those written agreements'' for consistency with the written agreements modification.

[231] DTCC at 5–6.

[232] *Id.* at 5.

[233] *Id.* at 6.

[234] OCC at 6.

[235] To improve grammar and clarity, the Commission has also modified the phrase ''specify to what services such service providers are relevant'' to ''specifying which core services each service provider supports'' in final Rule 17Ad–26(a)(2).

[236] DTCC at 8–9 (The commenter stated that the proposed requirement ''overestimates the negotiating leverage that CCAs have when entering contracts with service providers or assumes that CCAs would be able to unilaterally require service providers to continue performance during a recovery or orderly wind-down.'').

the Commission's goals for this aspect of the proposal and recommends that the Commission revise proposed Rule 17Ad–26(a)(2) by removing any requirement that a CCA ''ensure'' continuation of services.[237] Alternatively, the commenter requested that the Commission adopt a standard that acknowledges these limitations of a CCA to ensure continued performance of service providers and that requires a CCA to establish, implement, maintain, and enforce written policies and procedures reasonably designed to facilitate considerations of contractual provisions with service providers that, subject to continued payment by the CCA (or successor) obligates them to continue to perform in the event of a recovery or during an orderly wind-down.[238]

Another commenter stated it ''does not believe it is possible for a CCA to 'ensure' that a service provider would perform.'' The commenter also stated that a CCA can and should analyze whether a service provider has any termination rights or other contractual basis for not performing in a recovery or wind-down situation. The commenter also stated that a CCA should assess and document how it would handle the situation where a service provider has a right to terminate or otherwise not perform in a recovery or wind-down situation.[239] Accordingly, the commenter suggested that proposed Rule 17Ad–26(a)(2) be modified to require a CCA evaluate whether the service provider would continue to perform in the event of a recovery or orderly wind-down and address how the CCA would handle any termination or alternation of performance by the service provider.

The Commission acknowledges that, while a CCA can, and generally should, include provisions in its written agreements so that it can contractually require that a service provider for core services continues to perform during a recovery or wind-down, a CCA may not be able to compel a service provider to continue to perform in all circumstances. However, as proposed, Rule 17Ad–26(a)(2) addresses planning for a recovery or wind-down scenario by requiring written policies and procedures reasonably designed to address how a CCA *would* ensure that service providers for core services would continue to perform in the event of a recovery and during an orderly wind-down.[240] Thus, even though a CCA may not be able to compel a service provider to continue performing in all circumstances, such planning and any related contractual provisions designed to continue performance under the contract help limit the potential for abrupt or unanticipated disruptions in services during a recovery or wind-down event.[241] Achieving this requirement would likely involve an evaluation of whether the service provider would continue to perform in the event of a recovery or orderly wind-down and address how the CCA would handle any termination or alteration of performance by the service provider. As previously discussed above, a CCA generally should consider when and how to include provisions in its written agreements with service providers that acknowledge and help ensure that service providers can continue to perform their services during a recovery or wind-down event to avoid potential disruptions in core services. In so doing, a CCA generally should consider the terms to which its service providers may be willing or unwilling to agree, so that the CCA can evaluate its options effectively and develop its written agreement accordingly. As this requirement concerns actions taken at the planning stage and does not require a CCA to compel another entity to act, the Commission is not making further modifications to Rule 17Ad–26(a)(2).

One commenter, while agreeing that proposed Rule 17Ad–26(a)(2) identifies a key component of planning for recovery and orderly wind-down, stated that the Commission would best accomplish its objective of ensuring continued performance by service providers for core services by amending the proposed rule to focus on the CCA's relevant processes for third-party engagement and management rather than on conditions at a snapshot point in time, as the nature of a CCA's relationship with a service provider, the services provided, and the roster of relevant service providers necessarily evolves over time.[242] The commenter recommended slightly altering the language of the relevant portion of proposed Rule 17Ad–26(a)(2) to state the following:

> . . . address *the process by which* ~~how~~ the CCA *seeks to* ~~would~~ ensure that service providers would continue to provide such critical services in the event of a recovery and during an orderly wind-down, including consideration *and tracking* of contractual obligations with such service providers and whether those obligations are subject to alteration or termination as a result of initiation of the recovery and orderly winddown plan.'' [243]

As stated by the commenter, a CCA's roster of service providers for core services evolves over time as does the relationship with each such service provider and the services provided by it. However, a CCA is not required to outline any process or other means it uses to track relationships with service providers for core services in its RWP. Accordingly, final Rule 17Ad–26(a)(2) requires only the identification and description of such service providers, and a CCA has discretion on how to address any changes or updates to the service providers, which could be addressed in the reviews of a CCA's RWP required by final Rule 17Ad–26(a)(9).[244]

One commenter raised the possible interaction with the U.S. Bankruptcy Code in connection with the transfer of critical services to another legal entity as part of an orderly wind-down strategy.[245] The commenter stated that the Bankruptcy Code would stay any vendors from terminating their agreements subject to getting paid, which could allow for an assignment to the other legal entity.[246] According to the commenter, this effectively would address the concern without an unnecessary and overly prescriptive rule.[247]

The Commission agrees that, in a scenario involving the transfer of services from a CCA to another legal entity, bankruptcy proceedings may facilitate continuity of services by, for example, staying any vendors from terminating their agreements. The Commission also acknowledges that, during a recovery or wind-down, service providers, affected participants, or other stakeholders in the CCA may attempt to initiate bankruptcy proceedings themselves for any number of reasons. Ultimately, the requirements in Rule 17Ad–26 are designed to promote effective planning for a recovery or

[237] DTCC at 9.

[238] *Id.*

[239] ICE at 4.

[240] The requirements of Rule 17Ad–26 lay out necessary elements of a RWP, while the requirement for the RWP itself resides in Rule 17Ad–22(e)(3)(ii), which requires reasonably designed written policies and procedures.

[241] A CCA designated systemically important generally should consider also whether and how such agreements may be impacted by the resolution or transfer of services conducted by the resolution authority pursuant to Title II.

[242] OCC at 6.

[243] *Id.* at 7.

[244] In addition, board oversight of service provider relationships is subject to the requirements of Rule 17Ad–25(i), 17 CFR 240.17ad–25(i), which can also help ensure that relationships continue without sudden disruption in the event of a recovery or wind-down scenario.

[245] DTCC at 9.

[246] *Id.*

[247] *Id.*

orderly wind-down, and the possibility of bankruptcy proceedings do not reduce a CCA's obligations to plan effectively.

3. Scenarios: Rule 17Ad–26(a)(3)

Proposed Rule 17Ad–26(a)(3) required a CCA's RWP to identify and describe scenarios that may potentially prevent the CCA from being able to provide its critical payment, clearing, and settlement services identified in proposed Rule 17Ad–26(a)(1) as a going concern, including uncovered credit losses (as described in paragraph (e)(4)(viii) of 17 CFR 240.17ad–22), uncovered liquidity shortfalls (as described in paragraph (e)(7)(viii) of 17 CFR 240.17ad–22), and general business losses (as described in paragraph (e)(15) of 17 CFR 240.17ad–22).

Commenters differed on the level of granularity that was appropriate in the rule. One commenter stated that it supported the proposed rule, agreed that appropriate scenarios will vary across different CCAs serving different markets, and stated that the Commission has provided appropriate discretion to a CCA to identify the scenarios most appropriate to its unique circumstances.[248] The commenter also stated that the Commission should not identify particular scenarios for a CCA to address in its RWP.[249] The Commission agrees with this commenter, and reiterates that the risks that may potentially prevent a CCA from being able to provide its core services vary across different types of CCAs and even across CCAs of the same type, resulting in identified scenarios that differ from CCA to CCA.[250]

Another commenter stated that the enumerated list of scenarios in Request for Comment No. 22 in the RWP Proposing Release [251] is comprehensive and in line with international standard setting guidance and further stated that the list should be considered a minimum, and supported a more granular list of scenarios that a CCA should consider.[252] The Commission is not including such a further list of specific scenarios in final Rule 17Ad–26(a)(3). The rule requires a CCA to identify and describe scenarios for uncovered credit losses, uncovered liquidity shortfalls, and general business losses.[253] Under these broad categories, each CCA must identify scenarios considering the unique circumstances of CCA, including the market served and products cleared. Furthermore, a more granular list of scenarios may not be appropriately applied to all CCAs, considering the variance in the circumstances each individual CCA faces, and such a prescriptive approach with a granular list of scenarios would be contrary to the principles-based approach to Rule 17Ad–22(e), which contains the requirement for a CCA to have a RWP.[254] The commenter also stated that it could be a worthwhile analysis to see if plans would still be viable under a combination of scenarios, as there is potential for simultaneous shocks to occur.[255] A CCA, considering the unique circumstances faced by it, may identify combinations of scenarios in its analysis to achieve the requirements of final Rule 17Ad–26(a)(3). The discretion to consider combinations of scenarios arising from the potential of simultaneous shocks best remains with a CCA in its planning for a recovery or orderly wind-down. In addition, the commenter recommended that the Commission consider greater transparency around the distinction between default and non-default losses and the tools used under these scenarios.[256] However, information available in current rulebooks of the CCAs and through the SRO rule filing and advance notice processes provides transparency on the RWPs of CCAs, including how a CCA would address a default or non-default loss and the tools available in such scenarios.[257] As a result, additional mechanisms to promote transparency are not necessary, as a clearing member or market participant may obtain from these publicly available documents a general understanding of the scenarios a CCA has identified for default and non-default losses and the tools that could be used under such scenarios.

One commenter stated that the requirement of explicit consideration in the recovery plan of what might lead to each scenario coming into being and how the scenario might take shape (including prerequisite contemplated market conditions) imposes a small burden on compliance and risk functions in the entity while creating greatly-enhanced transparency to investors and regulators around how, how quickly, and under what conditions the entity may fail to meet obligations.[258] The Commission agrees that explicit consideration of what might lead to a scenario coming into being and how the scenario might take shape are important elements of identifying *and describing* scenarios, and accordingly, Rule 17Ad–26(a)(3) requires a CCA to both identify and describe such scenarios.[259] In identifying and formulating the description of such scenarios, the CCA can share information and analysis with its participants and other key stakeholders to develop its own

[248] OCC at 8.

[249] *Id.*

[250] RWP Proposing Release, *supra* note 18, at 34721.

[251] *Id.* at 34725.

[252] The Associations at 15 (citing CPMI–IOSCO Recovery Guidance, *supra* note 25, at 2.4.5).

[253] *See generally,* PFMI, *supra* note 9, at 3.15.1 (describing. as a general matter, the commonly understood meaning of ''general business risk'' in the context of FMIs, as follows: ''General business risk refers to the risks and potential losses arising from an FMI's administration and operation as a business enterprise that are neither related to participant default nor separately covered by financial resources under the credit or liquidity risk principles. General business risk includes any potential impairment of the FMI's financial position (as a business concern) as a consequence of a decline in its revenues or an increase in its expenses, such that expenses exceed revenues and result in a loss that must be charged against capital. Such impairment can be caused by a variety of business factors, including poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses. Business-related losses also may arise from risks covered by other principles, for example, legal risk (in the case of legal actions challenging the FMI's custody arrangements), investment risk affecting the FMI's resources, and operational risk (in the case of fraud, theft, or loss).'').

[254] *See* CCA Standards Adopting Release, *supra* note 5, at 70800.

[255] The Associations at 15.

[256] *Id.; see also* ICI at 6, 8 (similarly requesting clear delineation between default and non-default loss scenarios).

[257] *See, e.g.,* RWP Proposing Release, *supra* note 18, at 34712 n.41; *see also supra* notes 81–100 (discussing the provisions of the SRO rule filing and advance notice processes, as well as other Commission rules that facilitate disclosure to clearing participants).

[258] Letter from Muth, dated June 10, 2023 (''Muth'') at 3.

[259] RWP Proposing Release, *supra* note 18, at 34721 (explaining that the set of scenarios would include scenarios arising from a participant default and from events not related to a participant default, and that potential scenarios not related to a participant default could include the realization of investment or custody losses, the failure of a third party, such as a settlement bank, to perform a critical function for the covered clearing agency, or scenarios caused by a systems compliance and integrity (SCI) event or other significant operational disruption, such as a significant cybersecurity incident); *id.* (explaining that each scenario generally should be analyzed individually in the recovery plan, with the analysis including: a description of the scenario; the events that are likely to trigger the scenario; the covered clearing agency's process for monitoring such events; the market conditions, operational and financial issues, and other relevant circumstances that are likely to result from the scenario; the potential financial and operational impact of the scenario on the covered clearing agency and its participants, internal and external service providers, and relevant affiliated companies, both in an orderly and stressed market (*e.g.,* where markets are unavailable or there are limited solvent counterparties); and the specific steps that the covered clearing agency would expect to take if the scenario occurs or appears likely to occur, including, without limitation, any governance or other procedures that may be necessary to implement the relevant tools or use the relevant resources and to ensure that such implementation occurs in sufficient time to achieve the intended effect).

understanding, as well as the understanding of its participants and other key stakeholders, regarding the potential causes of recovery and wind-down scenarios. Various mechanisms under other Commission rules may facilitate this process, such as those requiring testing of its RWP,[260] consideration by its risk management committee of matters related to the RWP,[261] and general solicitation of stakeholder viewpoints regarding risk management topics.[262] As discussed further in Part IV.C.1 and V.B, the burden associated with such planning is appropriate considering the risks associated with the potential failure of a CCA.

Consistent with the above discussion, the Commission is adopting Rule 17Ad–26(a)(3) as proposed, except that it has replaced the term ''critical payment, clearing, and settlement services'' with ''core services'' consistent with the modifications to uses of ''critical'' services as discussed in Part II.C.1.

4. Triggers: Rule 17Ad–26(a)(4)

Proposed Rule 17Ad–26(a)(4) required a CCA's RWP to identify and describe criteria that would trigger the implementation of the recovery and orderly wind-down plans and the process that the CCA uses to monitor and determine whether the criteria have been met, including the governance arrangements applicable to such process.

One commenter proposed that the Commission provide a list of triggers that are required to be covered in the RWP and another list of triggers that a CCA should consider for inclusion in the RWP.[263] In contrast, another commenter stated that prescribing bright line, quantitative triggers that would apply to all CCAs, irrespective of their unique structures and the features of the markets they serve and products they clear, would run the risk of creating market instability by potentially forcing a CCA to initiate its RWP even when the CCA has not yet made the determination that it is necessary.[264] For that reason, the commenter stated that it supports the Commission's determination to allow CCAs to identify appropriate triggers for their individual circumstances.[265] The Commission is not specifying a list of triggers in the rule for inclusion in an RWP. As stated in the RWP Proposing Release, for some circumstances, the trigger is obvious (*e.g.,* uncovered default losses),[266] and the Commission is not explicitly including such triggers in the final rule because it has already required in Rule 17Ad–26(a)(3) that CCAs identify and describe scenarios based on the most obvious types of triggers (*e.g.,* uncovered default losses, as well as uncovered liquidity shortfalls and general business losses) and also included each of these triggers in the definitions of ''recovery'' and ''orderly wind-down'' to ensure that CCAs consider these types of circumstances throughout the development of their RWPs.[267] For other circumstances, as the Commission stated in the RWP Proposing Release, a CCA may have to employ more judgment to develop appropriate triggers,[268] and discretion should be afforded to a CCA in the planning process to develop these triggers instead of having the Commission delineate a list of triggers that a CCA should consider. This view generally aligns with the latter commenter, in that the final rule provides for a CCA to identify appropriate triggers for its individual circumstances.[269] The Commission further agrees with the latter commenter that the risk of having bright-line triggers could result in forcing a CCA to initiate its RWP even when the CCA has not yet made the determination that it was necessary, which could lead to market instability.

Regarding CCA discretion to trigger the RWP, one commenter proposed that the general assumption should be that triggers are automatic, unless the CCA makes the determination that discretion is appropriate for a certain trigger.[270] The Commission disagrees and is not requiring in the rule that triggers execute automatically. As suggested by the commenter,[271] automatically triggering a RWP without discretion could adversely affect market stability. In the RWP Proposing Release, the Commission stated that the identification of triggers does not mean that such triggers should be self-executing; instead, the importance of identifying triggers lies in ensuring that a CCA considers and identifies *ex ante* when it would initiate its RWP.[272] The Commission also stated that it believes that the RWP must identify and describe the process that the CCA uses to monitor and determine whether the criteria have been met, including the governance arrangements applicable to such process.[273] The final rule provides a CCA with discretion to consider this guidance and to identify and describe triggers appropriate to its RWP and whether any such triggers are automatic or discretionary.

The Commission is replacing the word ''would'' with ''could'' in final Rule 17Ad–26(a)(4) to avoid any presumption that triggers are self-executing and to reiterate the Commission's statement in the RWP Proposing Release that the identification of triggers ''does not mean that such triggers should be self-executing.'' [274]

5. Tools: Rule 17Ad–26(a)(5)

Proposed Rule 17Ad–26(a)(5) required the RWP of a CCA to identify and describe the rules, policies, procedures, and any other tools or resources the CCA would rely upon in a recovery or orderly wind-down. The Commission is adopting Rule 17Ad–26(a)(5) as proposed.[275]

In the RWP Proposing Release, the Commission stated that the proposed requirement to describe rules, policies, procedures, and any other tools or resources that may be used in advance for certain situations would provide some level of predictability in such a situation and avoid unexpected actions because it would allow participants to understand the potential of tools or resources that could be used, including whether any of the tools would require participant involvement or resources (such as a cash call).[276] While stating that rules, policies, procedures, and any other tools or resources should address shortfalls arising from the stress scenarios identified by the CCA, the Commission declined to prescribe particular tools, such as tear-up or margin haircutting, that a CCA would be

[260] *See infra* Part II.C.8 (further discussing the requirements for RWP testing in new Rule 17Ad–26(a)(8)).

[261] *See infra* note 366 (further discussing requirements related to the risk management committee in Rule 17Ad–25(d)(2)).

[262] *See infra* note 367 (further discussing requirements for soliciting stakeholder viewpoints in Rule 17Ad–25(j)).

[263] The Associations at 17.

[264] OCC at 8.

[265] *Id.*

[266] RWP Proposing Release, *supra* note 18, at 34721.

[267] *See infra* Part II.D (further explaining the definitions of ''recovery'' and ''orderly wind-down'').

[268] *Id.*

[269] *See supra* note 264.

[270] The Associations at 18.

[271] *See supra* note 264.

[272] RWP Proposing Release, *supra* note 18, at 34721.

[273] *Id.*

[274] *Id.*

[275] To improve grammar and clarity, the Commission is adopting a technical amendment to the final rule text. Specifically, the Commission is removing use of the word ''upon,'' and adding the phrase ''on which,'' such that final Rule 17Ad–26(a)(5) states: ''Identify and describe the rules, policies, procedures, and any other tools or resources on which the covered clearing agency would rely in a recovery or orderly wind-down.''

[276] *Id.* at 34722.

required to include in its RWP.[277] The Commission stated its belief that this proposed requirement preserved discretion for each CCA to consider the full range of available recovery tools and select those most appropriate for the circumstances of the CCA, including the products cleared and the markets served.[278]

a. Discretion for CCAs in Selection of Tools

One commenter stated that the rule should preserve discretion for each CCA to consider the full range of available recovery tools and select those most appropriate for the circumstances of the CCA.[279] Another commenter agreed with the Commission's decision not to mandate or prescribe the use of tools in certain situations and ''believes that [CCAs] should have the discretion to determine the appropriate mix of tools to be used.'' [280] Another commenter ''believe[s] that the clearing agency should be free to select the right or most appropriate tools for the markets and products it clears without any regulation constraints.'' [281] The Commission generally agrees with these commenters and is adopting the rule as proposed, which allows for discretion by a CCA in the selection of tools that are most appropriate for the circumstances of the CCA.

One commenter stated that the proposal would continue to provide CCAs with ''unbridled authority to inappropriately allocate default losses to non-defaulting customers through tools such as partial tear-ups (PTUs) or variation margin gains haircutting (VGMH).'' [282] The commenter further stated that the Commission should prescribe the tools that a CCA must use during recovery or wind-down, claiming that specifying the tools a CCA must deploy in those scenarios would be most effective at protecting non-defaulting customers' assets, a critical priority of an RWP in the commenter's view.[283] The commenter added that ''[u]nfortunately, the proposals continue to provide broad discretion to a clearing entity to determine its recovery and orderly wind-down tools, which effectively sanctions the use of tools that may result in the inappropriate allocation of non-defaulting customers' assets.'' [284]

A CCA does not have ''unbridled authority'' to select the tools in its RWP. The selection of tools in each RWP has been and is subject to the SRO rule filing process, which provides for public comment and Commission review and approval before inclusion of a tool in the RWP.[285] Under section 19(b)(2)(C) of the Exchange Act,[286] the Commission will approve, and has approved,[287] proposed rule changes concerning the availability of a tool where the Commission finds that the proposed rule change is consistent with the requirements of the Exchange Act and the applicable rules and regulations thereunder.

The Commission also disagrees that prescribing the tools a CCA must deploy in recovery and wind-down scenarios would be most effective at protecting non-defaulting customers' assets. As the Commission has previously explained, a ''one-size-fits-all'' approach specifying recovery and orderly wind-down tools is not productive, and it is not possible to assess the utility of a particular tool in isolation without considering the context of RWP as a whole and the particular circumstances of a CCA.[288] Furthermore, the discretion afforded a CCA in developing the tools available for use in its RWP would not enable the CCA to engage in the ''inappropriate'' allocation of non-defaulting customers' assets. Instead, tools included in its RWP to allocate losses to non-defaulting customers may be necessary to prevent the potential transmission of systemic risk, and the planning facilitated by the RWP helps the CCA weigh the strengths and weaknesses of respective tools. In this way, the CCA has considered *ex ante* the set of tools that will be the most appropriate to address different scenarios.[289] Accordingly, when a CCA has determined to allocate losses to non-defaulting customers, it has likely passed the point where other resources or tools are available to address the loss. Although a certain tool may appear drastic in the way that it allocates losses, such allocation may be appropriate to prevent the systemic transmission of risk in extreme circumstances.

b. Safeguards, Prescriptions, and Limitations on Tools and Resources

One commenter stated that ''recovery tools and provisions should be designed in a way that allows clearing participants to limit their liability to the CCA and to ensure that recovery tools can only be used in a limited manner (in time and dollar value) to ensure that the impact of such tools is predictable and reliable during stress, and do not further destabilize the market.'' [290] The commenter further stated that ''limited use of recovery tools under regulatory oversight, in the interest of the whole market'' warrants codification.[291] Another commenter stated that certain recovery tools and procedures involve allocating losses to its clearing members or market participants, and therefore the tools must be transparent, predictable, and implemented with appropriate limitations and oversight so that the tools do not inappropriately assign losses to clearing members and market participants in a way that is destabilizing.[292] The commenter continued that it is important to ensure that loss allocation procedures appropriately balance the incentives of a CCA's owners and market participants to manage risk effectively and prevent a crisis from occurring.[293] The commenter stated loss allocation procedures should be well defined and that a CCA should not have autonomy to allocate losses away from its shareholders.[294]

As discussed in the prior section, certain tools may appear drastic in the way that they allocate losses. Because of this, the Commission agrees with commenters that transparency and predictability regarding the use of tools for recovery and wind-down is important. However, the Commission disagrees that additional rule text changes are necessary because transparency regarding the tools that may be used in a recovery or wind-down scenario, and a level of predictability regarding the use of such tools, are already provided through existing rules.[295] When a CCA proposes

[277] *Id.*

[278] *Id.*

[279] OCC at 8. The commenter added that ''a robust dialogue between CCAs, industry participants, and international standard-setting bodies concerning resolution tools is ongoing, and the Commission should avoid preempting with prescriptive rulemaking the development of consensus and common understanding that can emerge from such a dialogue.'' OCC at 9.

[280] ICC at 4.

[281] The Associations at 16.

[282] ICI at 7.

[283] *Id.* at 3, 6–7.

[284] *Id.* at 6.

[285] *See* RWP Proposing Release, *supra* note 18, at 34712, n. 41.

[286] 15 U.S.C. 78s(b)(2)(C).

[287] *See, e.g.,* Release 34–83916 (Aug. 23, 2018), 83 FR 44076 (Aug. 29, 2018) (SR–OCC–2017–020) (finding that the proposed rule change concerning OCC's recovery tools was consistent with section 17A(b)(3)(F) of the Exchange Act and Rules 17Ad–22(e)(2)(i), (iii), and (v), (e)(4)(viii) and (ix), (e)(13), and (e)(23)(i) and (ii) thereunder).

[288] CCA Standards Adopting Release, *supra* note 5, at 70809.

[289] *Id.*

[290] The Associations at 5. The commenter added that RWPs need to ensure that clearing participants' liability is limited and that certain tools can be used within monetary and time limits. *Id.* at 10.

[291] *Id.* at 12.

[292] SIFMA at 12.

[293] *Id.*

[294] *Id.*

[295] *See supra* notes 81–100 and accompanying text (discussing in further detail these Commission rules and processes facilitating input from and

to add or modify the tools available in its RWP, such modifications are subject to Commission review and approval, pursuant to the SRO rule filing and advance notice processes, which includes public notice and an opportunity for public comment and, if approved, an approval order describing how the modifications are consistent with the Exchange Act.[296] Furthermore, to achieve compliance with existing Rule 17Ad–22(e)(23), a CCA is obligated to establish, implement, maintain, and enforce written policies and procedures reasonably designed to provide for publicly disclosing all relevant rules and material procedures, including key aspects of its default rules and procedures, and provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the CCA.[297] Such policies and procedures should provide participants with relevant rules and procedures to evaluate the risks, fees, and other material costs that participants could incur in a recovery or wind-down scenario. In addition, new requirements in Rule 17Ad–26 related to scenarios, triggers, tools, testing, and implementation of the RWP also help ensure that the CCA is providing transparency to its participants and others as to whether and when certain tools may be used, based on the scenarios developed by the CCA and in a way that is informed by periodic testing of the RWP, which includes participation by a subset of clearing participants and other relevant stakeholders.

Regarding the limitations sought by certain commenters, any appropriate limitations on tools proposed for inclusion in a CCA's RWP would be addressed through the SRO rule filing process, where specific tools would be subject to Commission review and approval, as well as public comment. Furthermore, to approve the addition of such tools, the proposed rule change must be consistent with the requirements of the Exchange Act and any advance notice must also be consistent with the standard for advance notices set forth in the Dodd-Frank Act.[298] Among the rules and regulations applicable to a CCA is Rule 17Ad–22(e)(2)(vi), which requires a CCA to establish, implement, maintain, and enforce written policies and procedures reasonably designed to consider the interests of participants' customers, securities issuers and holders, and other relevant stakeholders of the CCA.[299] To the extent that participants oppose the use of a tool either as a general matter or under certain conditions, a CCA would be obligated under Rule 17Ad–22(e)(2)(vi) to consider those concerns when modifying its RWP to include such a tool. Such required considerations, which would include input from clients of clearing participants, securities issuers, transfer agents, and other market infrastructure to which the CCA is linked, generally should help ensure that a CCA considers and includes limitations on certain tools included in the RWP where appropriate and consistent with its obligations under the Exchange Act. Ultimately, whether limitations on specific tools will be appropriate depends on the circumstances in which the tools would be deployed, and so the Commission is not adopting limitations as to specific tools in this release.

Regarding the comment related to a CCA having the ''autonomy'' to allocate losses away from its shareholders, as explained above, whenever a CCA seeks to add or modify a tool available in its RWP, the CCA must obtain prior Commission approval for any tools that it may deploy in a recovery or wind-down scenario through the previously described SRO rule filing and advance notice processes, which provide for public notice and comment. In those processes, a CCA is attempting to gain approval of tools to have in place in advance of a recovery or wind-down scenario to prevent the losses incurred by the CCA from becoming a transmission mechanism for systemic risk. This necessarily requires the CCA to seek an appropriate balance between affording participants predictability and certainty, on one hand, and ensuring that the CCA can effectively manage risk to continue its risk mitigating function within the broader financial system, on the other.[300] While a CCA will retain discretion consistent with its rules, policies, and procedures regarding the ways to implement its RWP if a recovery or wind-down scenario arises, the CCA's discretion to allocate losses to its participants will always be limited by the requirements of the Exchange Act and Commission rules and regulations thereunder. Accordingly, a CCA would not have complete autonomy to allocate losses away from its shareholders.

c. Specific Limitations or Bans on Certain Tools

Several commenters requested the Commission place limitation on or ban certain recovery tools. Two commenters generally stated that partial tear-ups should be subject to appropriate limitations and restrictions.[301] One commenter stated that forced allocation should be completely barred.[302] For variation margin gains haircutting, commenters generally stated that the Commission should place restrictions on the time and amount, and that this tool should only be deployed with regulatory approval.[303] Commenters generally requested that the Commission ban initial margin haircutting.[304] For assessments on clearing members to replenish resources, commenters generally stated that there needs to be a maximum amount for assessments set at a reasonable level that is defined *ex ante.*[305]

The CCAs under the Commission's supervision vary in markets served, products cleared, and ownership structures. These differences, among others, make it imprudent for the Commission to *ex ante* ban or explicitly limit certain tools, for the same reasons discussed in Part II.C.5.b, *supra,* regarding whether safeguards, prescriptions, and other limits on tools and resources generally are appropriate. Rather, by establishing new requirements related to scenarios, triggers, tools, testing, and implementation of the RWP, Rule 17Ad–26 helps ensure that the CCA is providing transparency to its participants and others as to whether and when certain tools may be used, based on the scenarios developed by the CCA and in a way that is informed by periodic testing of the RWP, which includes participation by a subset of clearing participants and other relevant stakeholders.

d. Level of Specificity of Description in RWP

In the RWP Proposing Release, the Commission stated that the requirement to describe rules, policies, procedures,

transparency to clearing participants and other key stakeholders).

[296] *See id.* (discussing these processes in further detail); *see also* RWP Proposing Release, *supra* note 18, at 34712 n.41 (providing citations to existing RWPs approved by the Commission, which includes the current set of tools in each).

[297] 17 CFR 240.17ad–22(e)(23)(i), (ii).

[298] *See supra* notes 81–100 and accompanying text (discussing in further detail these Commission rules and processes facilitating input from and transparency to clearing participants and other key stakeholders).

[299] 17 CFR 240.17ad–22(e)(2)(vi).

[300] *See* CCA Standards Adopting Release, *supra* note 5, at 70829.

[301] SIFMA at 13; The Associations at 16–17.

[302] SIFMA at 13.

[303] *Id.;* The Associations at 10, 16–17.

[304] SIFMA at 12; The Associations at 11, 12, 16–17.

[305] SIFMA at 5, 12, 19, 20–21; The Associations at 12.

and any other tools or resources that may be used in advance for certain situations would provide some level of predictability in such a situation and avoid unexpected actions because it would allow participants to understand the potential of tools or resources that could be used, including whether any of the tools would require participant involvement or resources (such as a cash call).[306] The Commission also provided guidance for a CCA to generally consider when it is identifying and evaluating the appropriateness of tools and other resources for a particular recovery scenario or an orderly wind-down that may be included in its RWP.[307] Furthermore, the Commission laid out nine items that a CCA generally should consider when analyzing the tools to be included in its RWP.[308]

One commenter strongly supported the proposed requirement to describe tools a CCA would use in a recovery or wind-down scenario. [309] Another commenter stated that the Commission should require CCAs to provide further specificity on the use of recovery tools in the RWP to provide transparency and predictability for their clearing members, market participants, and the broader market and to ensure that these tools are not procyclical.[310] Several commenters stated that the Commission should make the guidance provided in the RWP Proposing Release mandatory.[311]

Requiring further specificity on the use of recovery tools in the RWP is not necessary as information on the recovery tools of a CCA is publicly available. As previously explained above, when a CCA proposes to add or modify the tools available in its RWP, such modifications are subject to Commission review and approval, pursuant to the SRO rule filing and advance notice processes, which includes public notice and an opportunity for public comment and, if approved, an approval order describing how the modifications are consistent with the Exchange Act.[312] Furthermore, to achieve compliance with existing Rule 17Ad–22(e)(23), a CCA is obligated to establish, implement, maintain, and enforce written policies and procedures reasonably designed to provide for publicly disclosing all relevant rules and material procedures, including key aspects of its default rules and procedures (which includes the tools that would be deployed pursuant to the RWP), and provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the CCA. With this information, clearing members, market participants, and the broader market can consider whether such tools are procyclical.

With respect to the comment stating that tools should not be procyclical, whether a tool is procyclical will necessarily depend on the way it is designed and applied, the products to which it is applied, and the market in which it would be used. In Part II.A.2.b.iii, the Commission discussed how a CCA might need to consider procyclical effects when collecting intraday margin, and commenters expressed support for ensuring that CCAs had appropriate discretion to apply margin to avoid procyclical effects. Similarly to that context, the Commission believes that discretion to select tools is a better approach than prescribing limits or imposing bans on certain tools in Rule 17Ad–26. Providing such discretion helps enable CCAs to apply their expertise and consider the range of tools they have developed in their RWPs for addressing a recovery or wind-down scenario that may minimize procyclical effects.

In the case of a recovery or wind-down scenario, procyclical effects may facilitate the unnecessary onward transmission of systemic risk. As such, when a CCA seeks to add or modify the tools available in a recovery or wind-down scenario, those modifications would be subject to the proposed rule change and advance notice processes, where the specific facts and circumstances of a particular CCA (such as its organizational structure, markets served, or products cleared) and public comments on the proposed modification can help the Commission and the CCA identify whether any tools would be inappropriate, or appropriate only with certain limitations, consistent with the CCA's obligations under the Exchange Act and the Dodd-Frank Act.[313]

The guidance in the RWP Proposing Release to identify and analyze tools for inclusion in the RWP is not being incorporated into the text of final Rule 17Ad–26(a)(5). This rule is part of the framework of rules applicable to CCAs that takes a principles-based approach, which does not prescribe specific arrangements to meet the required principles.[314] Given that each CCA, serves different markets, clears different products, and deploys different ownership structures, the Commission is not incorporating the guidance into the rule text.

e. Allocation of Non-Default Losses

One commenter stated that procedures should clearly distinguish between treatment of default losses resulting from the failure of a clearing member and non-default losses (''NDLs'') caused by a CCA's internal business decisions.[315] The commenter further stated that financial responsibility for NDLs should be borne by the CCA and not by clearing members and market participants, that CCAs should be required to specify tools that would be used in an NDL scenario, and that a rule is needed to require CCAs to reserve appropriate amounts for NDL.[316] Another commenter stated that a CCA's rulebooks and RWPs should make clear that the CCA is responsible for NDLs, for it is not generally appropriate for clearing members or participants to bear NDLs because they are not responsible for choices that lead to those losses.[317] The commenter also stated that regulators require CCAs to manage, monitor, and hold sufficient capital against NDLs to ensure that such losses do not disrupt a CCA's ability to perform obligations, and that RWPs should be required to demonstrate a CCA's ability to cover such NDLs.[318] Another commenter strongly recommended that the Commission ensure that the RWPs distinguish between the CCA's approach to default and non-default scenarios.[319] The commenter also strongly recommended that the Commission require that the recovery tools a CCA uses in a NDL scenario ensure that the CCA and its shareholders are fully responsible for non-default losses, reflecting the principle that CCA and its shareholders are responsible for NDLs because such losses result directly from business decisions of CCA's management.[320]

While the Commission's regulatory framework for CCAs does not use ''non-

[306] RWP Proposing Release, supra note 18, at 34722.

[307] *Id.*

[308] *Id.*

[309] ICI at 4, 5, n.15.

[310] SIFMA at 12.

[311] *Id.;* The Associations at 19; ICI at 5, n.15.

[312] *See supra* notes 81–100 and accompanying text (discussing in further detail these Commission rules and processes facilitating input from and transparency to clearing participants and other key stakeholders).

[313] *See supra* notes 81–100 and accompanying text (discussing in further detail these Commission rules and processes facilitating input from and transparency to clearing participants and other key stakeholders).

[314] *See* CCA Standards Adopting Release, *supra* note 5, at 70800.

[315] SIFMA at 5.

[316] *Id.* at 5, 12, 16, 18–19.

[317] The Associations at 4, 6, 7–8.

[318] *Id.* at 4.

[319] ICI at 3.

[320] *Id.* at 6, 7–8.

default losses'' to describe losses other than default losses, existing Rule 17Ad–22(e)(15) requires a CCA to implement risk management measures to address ''general business losses,'' [321] which generally includes what the commenters refer to as ''NDL.'' Having a requirement specific to address general business loss does distinguish those losses from other losses such as default losses.

Rule 17Ad–22(e)(15) requires a CCA to have policies and procedures reasonably designed to mitigate the risk that business losses result in the disruption of clearing services. Under these policies and procedures, CCAs are required to hold liquid net assets funded by equity sufficient to cover potential general business losses, including by holding the greater of either six months of the covered clearing agency's current operating expenses, or the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services of the covered clearing agency.[322] Accordingly, Rule 17Ad–22(e)(15) already requires a CCA to reserve appropriate resources to address general business losses and help ensure that the CCA internalizes financial responsibility for such losses by applying its own resources to general business losses. The particular mechanisms at each CCA for identifying the amount and holding appropriate resources under the rule have been set by the CCAs through the SRO rule filing and advance notice processes and are subject to examination.

Consistent with existing Commission rules, however, the CCA itself is not required to be ''fully responsible'' for general business losses.[323] Rather, such losses could trigger implementation of a CCA's RWP, as Rule 17Ad–22(e)(3)(ii) includes requirements directed to planning for recovery and orderly wind-down for ''losses from general business risk.'' [324] As previously discussed, Rule 17Ad–22(e)(15) requires a CCA to have policies and procedures for holding liquid net assets funded by equity sufficient to cover potential general business losses, including by holding the greater of either six months of the covered clearing agency's current operating expenses, or the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services of the covered clearing agency, as set forth in its RWP. Where such losses from general business risk prevent the CCA from continuing as a going concern and liquid net assets funded by equity held pursuant to Rule 17Ad–22(e)(15) have failed to cover potential business losses, a CCA may need to implement its RWP to fully address such losses. In such a case, the CCA would deploy resources held pursuant to Rule 17Ad–22(e)(15) to implement its RWP but may also,[325] pursuant to its RWP and any rules for loss allocation approved pursuant to the Rule 19b–4 process deploy tools that draw upon other resources of the CCA, including mutualized resources, to avoid it from becoming a transmission mechanism for systemic risk. Participation in a clearing agency where resources, and the loss allocation mechanisms that draw upon them, have been mutualized among the CCA and its participants, necessarily means that the CCA and its participants have agreed to mutualize losses, and such loss allocation mechanisms are explained in publicly available sources, including the CCA's rules, notices and approval orders published as part of the SRO rule filing process, and public disclosures made by the CCAs as required by Rule 17Ad–22(e)(23).[326]

f. Skin-in-the-Game Requirement

One commenter stated that Commission rules are needed to ensure that each CCA contributes equity to its default waterfall, even if the amount is not a meaningful loss absorbing resource, to serve as an additional risk management tool, and the commenter provided several accompanying recommendations to determine the appropriate amount that should be required.[327] Another commenter stated that it is important for a CCA to maintain a second tranche of equity to apply to losses before the CCA allocates losses beyond its allocation of losses above the funded default reserve to better align the interests of the CCA and its clearing members.[328] Another commenter stated that tools should ensure that a CCA designates a material amount of its own capital to cover default losses.[329]

The Commission is not adopting a ''skin-in-the-game'' (''SITG'') requirement.[330] In the context of a participant default, SITG may assist a CCA in addressing the resulting losses because a CCA will apply a designated amount of its own equity capital to address certain losses prior to allocating any prefunded resources of non-defaulting participants to the loss, or prior to applying an assessment to non-defaulting participants directing them to contribute additional resources because all other prefunded resources of the CCA have been exhausted.[331] The Commission has considered comments regarding SITG previously, stating that such new SITG requirements can help successfully manage the divergent incentives of a CCA's owners and participants and could be appropriate in the future.[332] While SITG generally can play a role in helping to ensure the proper alignment of incentives between the owners of a clearing agency and its participants,[333] in the context of this rulemaking regarding the planning for recovery and wind-down by CCAs, SITG would be a specific tool that a CCA may choose to incorporate into its RWP. As such, the Commission is not adopting a requirement for SITG to be a specific tool because the appropriateness of the tool in the context of planning for recovery and wind-down by CCAs will vary depending on the particular design and implementation of the RWP. Even though Commission rules for clearing agencies do not include an explicit requirement for SITG, CCAs generally have incorporated SITG into their respective default waterfalls.[334]

g. Compensation for Contributing Clearing Members

One commenter stated that the externalization of losses to non-defaulting clearing members and market participants should be treated as ''financing resources'' recoverable by those that contributed, which would make a distinction between loss

[321] 17 CFR 240.17ad–22(e)(15).

[322] 17 CFR 240.17ad–22(e)(15)(ii).

[323] As explained above, CCAs are required to have policies and procedures for holding sufficient liquid resources funded by equity to cover, at a minimum, six months of operating expenses or the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down. 17 CFR 240.17ad–22(e)(15)(ii); *see also* PFMI, *supra* note 9, at 3.15.

[324] 17 CFR 240.17ad–22(e)(3)(ii).

[325] *See* 17 CFR 240.17ad–22(e)(15).

[326] *See supra* notes 81–100 (discussing in further detail these Commission rules and processes facilitating input from and transparency to clearing participants and other key stakeholders).

[327] SIFMA at 5, 12–13, 16, 17–18.

[328] The Associations at 5, 11–12.

[329] ICI at 7.

[330] *See* CA Governance Adopting Release, *supra* note 12, at 84504; CCA Standards Adopting Release, *supra* note 5, at 70806.

[331] *See* CCA Standards Adopting Release, *supra* note 5, at 70806.

[332] CA Governance Adopting Release, *supra* note 12, at 84504.

[333] *See* CCA Standards Adopting Release, *supra* note 5, at 70806.

[334] *See* DTC Rule 4, Section 5 (''Corporate Contribution''); FICC Rule 4, Section 7a (''Corporate Contribution''); ICC Rule 801(b) (''ICE Clear Credit contributions''); LCH SA Article 4.3.3 (''LCH SA Contribution''); NSCC Rule 4 (''Corporate Contribution''); OCC Rule 101 (''Minimum Corporate Contribution'').

absorbing and financing resources.[335] Another commenter stated that the Commission should include a requirement for compensation of clearing members that cover losses during a recovery or a wind-down.[336]

Treatment of resources obtained from clearing members in a recovery or wind-down scenario would be subject to the CCA's rules, policies, and procedures, which would have been approved on an *ex ante* basis in the applicable SRO rule filing and advance notice processes. A CCA should be afforded discretion to structure its loss allocation rules, policies, and procedures in light of the needs of its unique ownership or governance structures, provided that those rules, policies, and procedures are consistent with the requirements of the Exchange Act and rules and regulations thereunder.

As previously discussed, disclosures that already must be publicly provided by CCAs under Rule 17Ad–22(e)(23)(ii) require a CCA to provide participants with sufficient information to enable the participants to evaluate the risks, fees, and other material costs they may incur by participating in the CCA. With that information, a participant may determine whether the CCA would compensate non-defaulting participants for contributions made during a recovery or an orderly wind-down.

h. Governance

One commenter stated that a CCA's RWP should include governance practices that obtain and address input from market participants on relevant risk issues and entail oversight by the systemic regulator in relation to tools like partial tear-up that may have broader market impact.[337]

Existing Commission requirements already address this concern for input and oversight.[338] First, the SRO rule filing and advance notice processes provide for public notice and comment allowing for market participants to provide input on changes to rules, policies and procedures regarding recovery tools, and such processes require review and approval by the Commission. Second, Rule 17Ad–22(e)(2) includes requirements designed to provide for governance arrangements that clearly prioritize the safety and efficiency of the CCA, support the public interest requirements in section 17A of the Exchange Act applicable to clearing agencies, and support the objectives of owners and participants. Third, the requirement in section 17A(b)(3)(F) of the Exchange Act to have rules designed, in general, to protect investors helps ensure that a CCA's risk management functions are appropriately aligned with the goal of risk mitigation and responsive to the legitimate concerns of the relevant constituents.

i. Other Comments on Resources

Several comments concerned resources in general that should be available in a recovery or a wind-down scenario. One commenter stated that rules are needed to require a CCAs to arrange *ex ante* resources for use in RWPs, that the Commission should require application of equity-funded assets to implement RWPs, that CCA capital should be available in full before entry into resolution, that rules should be explicit that equity is fully loss absorbing in resolution and shareholders claims are fully subordinate to other creditors, and that it is critical that resolution authorities require CCAs to set aside *ex ante* resources for recapitalization to be bailed-in by the resolution authority to continue to operate the resolved CCA.[339] Another commenter recommends including disclosures of external sources of liquidity (lenders, creditors, liquidity providers) and when applicable, where they sit in the waterfall.[340]

A CCA already is required to hold equity-funded assets to implement its RWP under Rule 17Ad–22(e)(15)(ii), which requires a CCA to hold liquid net assets funded by equity equal to the greater of either six months of the CCA's current operating expenses or the amount sufficient to ensure a recovery or orderly wind-down.[341] Other resources of the CCA available to cover certain losses before entry into resolution are those included in the current rules of the CCAs, which include SITG contributions [342] and liquid net assets funded by equity of the CCA to cover potential business losses under Rule 17Ad–22(e)(15).[343]

Comments were received regarding the resolution of a CCA, and as described in the RWP Proposing Release, the FDIC would be appointed as the resolution authority of a CCA in the event the CCA was placed into resolution under Title II.[344] Ultimate decisions regarding resolution would be determined pursuant to the requirements of Title II,[345] and it is likely that a CCA's RWP would guide the resolution authority in evaluating any decisions to be made in support of an orderly resolution.

Regarding the disclosures of external sources of liquidity and where they sit in the waterfall, a CCA's rules, SRO rule filing notices and approval orders, and disclosures under Rule 17Ad–22(e)(15) provide transparency regarding the structure and composition of the default waterfalls across the CCAs.

6. Implementation: Rule 17Ad–26(a)(6)

Proposed Rule 17Ad–26(a)(6) required a CCA's RWP to address how the rules, policies, procedures, and any other tools or resources identified in Rule 17Ad–26(a)(5) would ensure timely implementation of the recovery and orderly wind-down plan.

Commenters expressed support for the rule as proposed.[346] One commenter encourages the Commission to be internally prepared and in a proactive position to receive, consider, and approve any necessary regulatory requests from CCAs in a timely manner when RWPs have been implemented.[347] As previously discussed, the Commission engages in ongoing supervision and oversight of CCAs to ensure that it is prepared to receive, consider, and act upon any requests related to RWPs. As discussed further in response to comments regarding Rule 17Ad–26(a)(7) below,[348] policies and procedures that ensure the timely implementation of the RWP pursuant to Rule 17Ad–26(a)(6) would necessarily include provisions that ensure timely notification to affected parties that the CCA will implement its RWP. Such affected parties generally should include clearing participants, service providers for core services, other key stakeholders, the Commission, and other regulatory authorities, as appropriate.

Another commenter recommended ''the implementation of rigorous governance around the use of tools or emergency powers.'' [349] The

[335] SIFMA at 13, 20–21.

[336] The Associations at 4–5, 10–12.

[337] SIFMA at 11.

[338] *See* 17 CFR 240.17ad–22(e)(2); 17 CFR 240.17ad–25; *see also infra* Part IV.B.1 (discussing the various ownership models across CCAs and relevant governance arrangements).

[339] SIFMA at 5, 20–21.

[340] The Associations at 13.

[341] 17 CFR 240.17ad–22(e)(15)(ii).

[342] *See supra* note 334.

[343] 17 CFR 240.17ad–22(e)(15).

[344] RWP Proposing Release, *supra* note 18, at 34712.

[345] *See supra* note 26 and accompanying text.

[346] OCC at 9; The Associations at 19–20.

[347] DTCC at 13. This concern is also relevant to the requirement in Rule 17Ad–26(a)(7) to provide notification to the Commission when a CCA is ''considering'' implementation of its RWP. *See infra* Part II.C.7.

[348] *See infra* Part II.C.7 (further explaining and distinguishing the requirement for ''timely implementation'' in Rule 17Ad–26(a)(6) from the requirement for notification specifically to the Commission when a CCA is ''considering implementing'' its RWP).

[349] The Associations at 19–20.

Commission has recently adopted rules intended to bolster the governance of CCAs through requirements regarding board composition and director independence, the nominating and risk management committees of the board, conflicts of interest, oversight of service providers, and the solicitation of stakeholder viewpoints.[350] Through these existing requirements, as well as the rule filing and advance notice requirements applicable to CCAs, the appropriate governance processes exist to help ensure that further development of the RWPs is consistent with the rules adopted in this release. The Commission is adopting Rule 17Ad–26(a)(6) as proposed.

7. Notification to Commission: Rule 17Ad–26(a)(7)

Proposed Rule 17Ad–26(a)(7) required a CCA's RWP to include procedures for informing the Commission as soon as practicable when the CCA is considering initiating a recovery or orderly wind-down. In the RWP Proposing Release, the Commission stated it is critical that notice of potential recovery and wind-down be provided to the Commission as soon as practicable.[351] The Commission explained that the systemic risk concerns raised by a recovery or orderly wind-down of a CCA are significant. With notice being provided to the Commission when a CCA is considering implementing its RWP, the Commission has the opportunity to consider whether the CCA engages the potential recovery or wind-down event consistent with its established RWP and the requirements of Commission rules to help mitigate the potential onward transmission of systemic risk and help ensure that a wind-down, if necessary, is orderly. Furthermore, such early notice would help the Commission ensure that it has information that it can share with other relevant authorities, such as the resolution authority, regarding the potential need for resolution.[352] As discussed in the RWP Proposing Release, the Commission already maintains regular contact with each of the CCAs through its supervisory program, and this is a communication channel through which the CCA could provide notice to the Commission.[353]

One comment in support of Rule 17Ad–26(a)(6) as proposed stated that it was important for the Commission to be in a proactive position to receive, consider, and approve any necessary regulatory requests from CCAs in a timely manner when RWPs have been implemented.[354] Several commenters asked for clarification or further guidance on the ''considering initiating'' phrase in the proposed rule text. One commenter, agreeing that open communication is critical, stated that the ''considering initiating'' phrase introduces subjectivity and uncertainty into the requirement, which could expose a CCA and its responsible personnel to potential enforcement action if their interpretation differs from the Commission.[355] The commenter recommends changing the phrase to make the obligation to notify the Commission when the CCA has ''determined to initiate'' its RWP.[356] Similarly, other commenters stated that the proposed standard is vague and could lead to uncertainty about when the notification is required, and suggested, for clarity and consistent application, that the trigger to notify the Commission should be the formal decision to implement the plan.[357]

In requesting that the Commission remove ''considering'' from the rule text, these commenters misconstrue the purpose of the requirement in Rule 17Ad–26(a)(6) regarding timely implementation of the RWP with the requirement in Rule 17Ad–26(a)(7) regarding notice to the Commission. To ensure timely implementation of the RWP under Rule 17Ad–26(a)(6), a CCA generally should have policies and procedures that can ensure affected parties, including clearing participants, service providers, other relevant stakeholders, and other market infrastructure to which it is linked, as well as the Commission and other relevant authorities, receive notification that the CCA has begun to implement elements of its RWP. However, requiring a CCA to notify the Commission *only* when it has decided to implement its RWP would limit the Commission's ability to evaluate market conditions and the decision-making process of the CCA in the time between when it begins to consider implementing and before it has decided to implement. Once a CCA decides to implement its RWP, it will likely have numerous contractual obligations to share information regarding the implementation of its RWP with its participants, service providers, other key stakeholders, and other market infrastructure to which it is linked. Given these obligations, requiring notification only upon implementation would primarily serve the purpose of documenting and announcing the fact of implementation, rather than the separate but equally important purpose of informing the Commission, as market conditions are deteriorating or other events are occurring at the CCA that may trigger implementation of the RWP so that the Commission can consider whether it too should take action in response to the event.

In contrast to Rule 17Ad–26(a)(6)'s requirement that CCAs provide timely notice of the RWP's implementation, Rule 17Ad–26(a)(7) helps ensure that the Commission receives *advance* notice that stressed market conditions or other events have raised the potential for implementation of the RWP. This requirement for timely notification when the CCA is considering implementation of its RWP will significantly enhance the Commission's ability to conduct effective supervision and market oversight and to share information on a timely basis, as appropriate, with other authorities. While the Commission regularly engages with CCAs as part of its supervisory process to anticipate the need for potential regulatory requests, Rule 17Ad–26(a)(7) further helps the Commission should it need to act by promoting timely *advance* notification that a CCA may implement its RWP.

In addition, in contrast to the phase of a stressed market or other event where a CCA is considering implementation of its RWP, once a CCA has begun to implement its RWP the ability of the Commission to take steps of its own, consistent with its supervisory authority, and to coordinate with other authorities, may be more limited because the CCA will already be taking action in response to the event. For example, if a CCA is considering implementation of its RWP to deploy a certain recovery tool, to allocate losses, or to replenish resources, the Commission or other authorities may evaluate other available actions or tools that could also address or mitigate financial stability concerns in response to market events than the action planned by the CCA. In this regard, the Commission can best ensure that actions appropriate to maintaining financial stability can be made if it is notified when a CCA is ''considering'' action, rather than when a CCA has already begun to implement its RWP.

As explained above, commenters also sought clarification regarding ''consider

[350] *See* CA Governance Adopting Release, *supra* note 12.

[351] RWP Proposing Release, *supra* note 18, at 34723.

[352] *Id.*

[353] *Id.*

[354] DTCC at 13; *see also supra* note 347.

[355] OCC at 9 (explaining that this potential liability is particularly true if the triggers require an application of judgment while monitoring operations and risk on a continuous basis).

[356] *Id.* at 9–10.

[357] ICE at 4; CCP12 at 5.

initiating.'' [358] In response to concerns that the Commission and the CCA may differ regarding the exact moment when a CCA begins to ''consider'' implementing its RWP, CCAs generally should seek to provide notification to the Commission that establishes an open line of communication, enabling the Commission, and other relevant authorities with which the Commission may be coordinating, time to evaluate market conditions and the potential financial stability implications of any decision under the RWP. The ability for the Commission or other relevant authorities to act potentially could help mitigate the need for a recovery or wind-down. When market conditions are deteriorating rapidly, the CCA may be the first party in a position to identify a potential scenario that could trigger implementation of the RWP, and so providing advance notice to the Commission can help the CCA, the Commission, and other potentially relevant authorities, navigate market events. Accordingly, a CCA generally would be ''considering'' implementing a recovery when the clearing agency determines that a market event may result in uncovered losses, liquidity shortfalls, or general business losses at the CCA following end-of-day settlement, or if the CCA anticipates that it will need to deploy prefunded financial resources or liquidity arrangements following end-of-day settlement in order to continue meeting its regulatory obligations.[359] Similarly, if a clearing agency is faced with circumstances in which its status as a ''going concern'' may be in doubt following end-of-day settlement, resulting in the potential for a permanent cessation, sale, or transfer of one of more of its core services, a CCA would be ''considering'' implementation of its orderly wind-down plan.[360] Whether a CCA is ''considering'' implementing its RWP also depends on governance and decision-making processes within the CCA, and so CCAs generally should consider at what levels decisions regarding RWP can be made within their organization. For example, a CCA generally should consider whether decisions regarding RWP implementation and Commission notification are made by senior management, a specific senior officer, or the board of directors. The appropriate governance level may vary depending on the specific type of event or element of the RWP. For example, in considering implementing a recovery, questions regarding the potential for liquidity shortfalls may fall primarily to management or specific senior officers, whereas decisions regarding cessation or transfer of the business are likely to require board input before considering implementation. Accordingly, the Commission is retaining the ''considering'' language as proposed.

Some commenters also expressed views on the means of notification. One commenter stated that the notification should be made in a way that leaves an audit trail and can be better directed, avoiding a potential for the notification to not reach the right destination or receive the appropriate level of attention.[361] One commenter recommended that a CCA be permitted to select the particular means of communication that would be used to notify the Commission, including dedicated phone numbers, email addresses, or other forms of electronic communication.[362] Because Commission staff already remains in regular contact with each of the CCAs as part of its supervisory program,[363] the purpose of the requirement in Rule 17Ad–26(a)(7), in part, is to facilitate a line of communication between the Commission and the CCA regarding the event, so that the Commission can evaluate the circumstances of a potential recovery or wind-down and its potential transmission of systemic risk. In this sense, the timeliness of notification is paramount, while the form of notification or the process of notification may vary under the circumstances so long as the CCA establishes a line of communication. Accordingly, the Commission is modifying the rule in response to these comments to replace the rule text stating ''Include procedures for informing'' with ''Require the covered clearing agency to inform.'' This modification removes the need to codify specific notification forms or procedures, providing the CCA with discretion to assess the best method for communication and the level of formality in the communication that is most appropriate under the circumstances, while ensuring that the timeliness of notification is the primary focus of the CCA. To ensure an appropriate audit or record of its decision, a CCA generally should consider memorializing the steps that it took to notify the Commission. In some circumstances, it may be appropriate to complete this documentation after the fact of notification, while in others, as described by the commenter, it may be appropriate to document notifications internally to ensure a proper audit trail. Any such correspondence with the Commission constitutes a record of a clearing agency and would be subject to the requirements of 17 CFR 240.17a–1.[364]

Two commenters stated that the Commission should require CCAs to notify clearing participants when the CCA is considering implementation of its RWP and when it has done so, in addition to providing notification to the Commission.[365] Commission rules already provide for notification to participants regarding a range of issues, which generally would include the implementation of the RWP. As previously discussed, requirements for timely implementation of the RWP under Rule 17Ad–26(a)(6) generally should include notification to participants and other stakeholders. In addition, other rules also promote the timely sharing of information between CCAs and clearing participants regarding their participation in the clearing agency. For example, Rule 17Ad–22(e)(23)(ii) requires that a CCA establish, implement, maintain and enforce written policies and procedures reasonably designed to provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the CCA. Because implementing a recovery or orderly wind-down may involve the use or replenishment of prefunded resources, as well as the potential allocation of losses from default or non-default loss scenarios to participants, a CCA generally would need to inform its participants regarding those aspects of a recovery or wind-down event at the time of implementation pursuant to Rule 17Ad–26(a)(6). In addition, a CCA

[358] The Commission is making a technical modification to the rule to replace ''initiating'' with ''implementing.'' ''Implementing'' is consistent with language used in other requirements in Rule 17Ad–26, as well as in the RWP Proposing Release and in the comments received more generally when referring to the implementation of the RWP. For example, Rules 17Ad–26(a)(4), (6), and (8) all use ''implementing'' rather than ''initiating.''

[359] *See, e.g.,* FSB Analysis, *supra* note 24, at 1–2 (analyzing CCP services across seven entities and, in so doing, identifying hypothetical default and non-default loss scenarios that would have required the use of, or exhausted the use of, recovery tools in some scenarios for some of entities' service lines).

[360] *See id.*

[361] The Associations at 20–21.

[362] DTCC at 12–13; *see also* Muth at 2 (''In part because of the complex Venn-diagram-esque relationship between financial regulators in terms of both activities and jurisdiction, management may be misinformed or uninformed as to when, how, and why to contact regulators who are the 'relevant authorities' under the CCA Standards or what to communicate that would be illustrative as to the entity's predicament.'').

[363] RWP Proposing Release, *supra* note 18, at 34723.

[364] Rule 17a–1.

[365] The Associations at 5; ICI at 5, n.15.

generally should discuss with its participants and other key stakeholders planning and development with respect to the RWP, as well as the results of testing. Two such venues for discussion of the RWP are already required by existing rules, as follows: Rule 17Ad–25(d), requiring the establishment of a risk management committee,[366] and Rule 17Ad–25(j), regarding the solicitation of stakeholder viewpoints.[367] These venues already require the CCA to share information regarding risk management topics, which necessarily would include the risk management implications of its RWP, with the risk management committee and with relevant stakeholders, respectively. In both cases, clearing participants would receive information regarding the RWP and have an opportunity to provide input (either as members of the risk management committee when reviewing matters regarding the RWP before the committee, or in providing viewpoints when solicited by the CCA).

In contrast, the purpose of the notification requirement in Rule 17Ad–26(a)(7) is to ensure that the Commission specifically has timely information regarding the potential for a CCA to implement recovery or wind-down. As previously discussed above, this helps ensure that the Commission can use the information in a timely manner to consider appropriate regulatory responses to market events, as well as to share information, as appropriate, with other authorities, such as the resolution authority, that also may be monitoring stressed market events alongside the Commission and may need to consider the potential for resolution. In addition, pursuant to clearing agency rules, clearing participants generally will be notified of circumstances related to a participant default, the potential for a portfolio auction, and the use of default management tools that may precede a recovery or wind-down event. While existing Commission rules,[368] as well as participant agreements or other arrangements between CCAs and their participants are likely to facilitate timely notification regarding the planning, development, and implementation of key aspects of the RWP, as discussed above, it may not be appropriate in all circumstances for a CCA to provide *advance* notice to participants that it is considering implementing its RWP because such notification could increase market stress or accelerate deteriorating conditions, precipitating the very recovery or wind-down event that, in the absence of such increase or acceleration, the CCA, the Commission, or another authority could take appropriate steps to mitigate and avoid. Accordingly, the Commission is not adding a provision specifically requiring notification that the CCA is considering implementing its RWP to clearing participants as part of Rule 17Ad–26(a)(7).

8. Testing: Rule 17Ad–26(a)(8)

Proposed Rule 17Ad–26(a)(8) required a CCA's RWP to include procedures for testing the CCA's ability to implement the recovery and wind-down plans at least every 12 months, including by requiring the CCA's participants and, when practicable, other stakeholders to participate in the testing of its plans, providing for reporting the results of the testing to the CCA's board of directors and senior management, and specifying the procedures for, as appropriate, amending the plans to address the results of the testing.

In the RWP Proposing Release, the Commission explained that a testing requirement is important since it should help ensure that a CCA's RWP will be effective in the event of an actual recovery or orderly wind-down.[369] The testing would likely be similar to that required under Rule 17Ad–22(e)(13), in that it would test how the RWP would perform in crisis situations, including the participation of senior management and the board of directors. The Commission stated that testing must involve the CCA's participants and, where applicable, other stakeholders. This inclusion should help to make sure that procedures will be practical and effective in the face of a recovery or orderly wind-down, noting that coordination will be required in such a situation.

The Commission also explained that testing every 12 months was an appropriate frequency because annual testing is already required for many other aspects of a CCA's risk management. Accordingly, a requirement for testing every 12 months for RWPs strikes an appropriate balance between the need to test an RWP and the desire to avoid duplicative requirements. The Commission further stated that a CCA may choose to conduct this RWP testing in conjunction with default testing for Rule 17Ad–22(e)(13) or business continuity testing. Due to the possibility of leveraging existing default management testing, the Commission believed that costs associated with RWP testing may not be too high for CCAs and likely would be moderate for participants, as they are already involved in the default management testing.[370]

a. Support for Testing Requirement

Several commenters expressed their agreement with or support of the proposed requirement to annually test the ability to implement a CCA's RWP.[371] One commenter agreed with the importance of ensuring that a CCA's RWP is workable for a potential crisis situation, stating that it is essential for the CCA, its members and customers, and regulators all have confidence that the RWP will operate as designed.[372] The commenter also stated that the value of periodic testing is to reduce the burden on a CCA when the need for implementing the RWP arises, a time when resources may be stretched thin, ensuring that there is a workable roadmap to address the situation at hand.[373] Similarly, a different commenter emphasized that it is critical for a CCA to be confident that the RWP would be effective in an actual recovery or orderly wind-down event.[374] Another commenter agrees that RWP testing is generally appropriate, provided that annual RWP testing can be combined with existing default management testing.[375] One other commenter echoed this point and agrees that plans need to be tested on a regular basis, and a test every 12 months would be in line with requirements for default testing.[376]

b. Scope of Testing and Interaction With Other Testing Requirements

Some commenters sought more clarity regarding the scope of the ''testing'' requirement in proposed Rule 17Ad–

[366] Specifically, Rule 17Ad–25(d)(2) requires that the risk management committee, in the performance of its duties, be able to provide a risk-based, independent, and informed opinion on all matters presented to the committee for consideration in a manner that supports the overall risk management, safety and efficiency of the registered clearing agency. 17 CFR 240.17ad–25(d)(2).

[367] Specifically, Rule 17Ad–25(j) requires that each registered clearing agency must establish, implement, maintain, and enforce written policies and procedures reasonably designed to require the board of directors to solicit, consider, and document its consideration of the views of participants and other relevant stakeholders of the registered clearing agency regarding material developments in its risk management and operations on a recurring basis.

[368] *See, e.g., supra* notes 366–367 and accompanying text.

[369] RWP Proposing Release, *supra* note 18, at 34723.

[370] *Id.* at 34735.

[371] OCC at 10; The Associations at 21; ICE at 4; ICI at 5; CCP12 at 4.

[372] OCC at 10.

[373] *Id.*

[374] CCP12 at 4.

[375] ICE at 4.

[376] The Associations at 21.

26(a)(8), recommending baseline standards and discretion to test different scenarios or aspects of the plan each year.[377]

Several commenters specifically stated that CCAs should have discretion and flexibility to determine an appropriate approach to testing so that testing would not become duplicative, unnecessary, or burdensome.[378] One commenter stated that a new testing requirement would require significant investment of time and resources from a CCA's most critical personnel, both to plan and execute the testing, which is a highly manual process.[379] Similarly, another commenter explained that RWP testing at CCAs typically includes various types of exercises, and suggested that any final rule make clear that a CCA has discretion to rely on such practices to satisfy Rule 17Ad–27(a)(8).[380]

The definitions in Rule 17Ad–26(b) regarding ''recovery'' and ''orderly wind-down'' provide much of the direction that commenters seek regarding the scope of testing contemplated under Rule 17Ad–26(a)(8). Specifically, RWP testing would involve testing a CCA's plans for recovery (*e.g.,* actions the CCA would take to address an uncovered loss, liquidity shortfall, or capital inadequacy, whether arising from a participant default or other causes, including actions to replenish any depleted prefunded financial resources and liquidity arrangements), and for wind-down (*e.g.,* actions the CCA would take in scenarios that exhaust the CCA's ability to replenish resources and necessitate that it effect the permanent cessation, sale, or transfer of one or more of its core services).[381] As such, testing of RWPs generally should include scenarios that consider both default and non-default scenarios. When testing the RWP against a default scenario, the clearing agency generally should consider the effects of exhausting prefunded resources, to ensure that the clearing agency also tests its ability replenish those resources (*i.e.,* complete recovery). In the context of a default scenario, such a test may have similar elements to a default management testing exercise, though it would necessarily consider steps related to replenishing prefunded resources deployed in response to the scenario. In contrast, testing that considers non-default losses generally could not leverage existing testing related to default management, and so testing exercises developed for RWPs under Rule 17Ad–26(a)(8) would also need to include testing of non-default loss scenarios to demonstrate that RWP testing was reasonably designed, consistent with the rule requirements. Because of the range of scenarios that may implicate RWPs, including scenarios in both default and non-default scenarios, or a combination thereof, a CCA retains discretion under the annual testing requirement to organize and design its testing scenarios to ensure that testing exercises produce effective tests of the elements of the RWP, in such a way that the CCA can review its testing results and consider improvements over time.

With respect to the investment of time and resources necessary to plan and execute testing, and the charge that RWP testing is ''unnecessary'' or ''burdensome,'' the commitment of such time and resources is critical to ensuring an effective RWP.[382] The circumstances in which a CCA may need to implement its RWP are of such systemic consequence that CCAs should test their rules, policies, and procedures so that, should real world conditions arise, the CCA is prepared to implement its RWP in an effective manner, thereby helping to ensure the CCA does not become a mechanism for spreading contagion through the financial system or otherwise endangering financial stability. Similar to the way that default management testing under Rule 17Ad–22(e)(13) helps a CCA test its close-out procedures for a defaulted portfolio so that policies and procedures are sufficiently developed to promote a smooth and successful process,[383] RWP testing can help a CCA ensure that its policies and procedures for recovery and orderly wind-down are sufficiently developed and can be effective in completing loss allocation and replenishment tasks, in the case of a recovery, or a cessation of services, in the case of a wind-down. A CCA that does not engage in regular testing of its RWP may find, in a moment where stressed market conditions are likely to be extreme and the viability of the CCA is itself in question, that it is under-prepared to implement its plan, potentially negating the benefits of the planning process. The Commission agrees that effective planning for RWP testing is likely to be a manual process that draws upon critical personnel because RWP planning requires careful consideration of the procedures and tools upon which a CCA would draw in extreme market circumstances to maintain the ongoing viability of the CCA itself. As such, critical personnel, who may be directed in the RWP to make loss allocation or other critical decisions during a recovery or wind-down scenario, generally should participate in RWP testing conducted by the CCA to help ensure the design and execution of testing scenarios resemble, as well as can be estimated during the planning and testing process, anticipated real-world conditions necessitating a recovery or wind-down.

[377] Davidson at 5 (explaining that ''testing'' needs to be clearly defined, pragmatic, and cost effective, and that it comes in many varieties, listing among the different types of testing conducted by CCAs business continuity tests, margin model and clearing fund testing and validations, default management testing, compliance testing, and internal audit testing); SIFMA at 11 (urging the Commission to set baseline standards for testing that would require CCAs to adhere to standards based on common best practices rather than establishing voluntary disparate practices); The Associations at 21 (stating that not every recovery scenario needs to be tested annually but that a CCA should pick material and significant scenarios and endeavor to test different scenarios or different parts of the plan each year).

[378] ICE at 4–5; OCC at 10–11 (identifying its existing regular and periodic testing efforts (*e.g.,* default simulations, table-top exercises, monthly analysis and monitoring for assessment capability) used to assess and enhance the operational capacity and effectiveness of risk management processes and tools, and stating that they are appropriately designed to ''help ensure that the RWP will be effective in the event of an actual recovery or orderly wind-down''); DTCC at 10–11; CCP12 at 4–5.

[379] OCC at 10.

[380] CCP12 at 4.

[381] More specifically, Rule 17Ad–26(b) defines ''recovery'' to mean the actions of a covered clearing agency, consistent with its rules, procedures, and other *ex ante* contractual arrangements, to address any uncovered loss, liquidity shortfall, or capital inadequacy, whether arising from participant default or other causes (such as business, operational, or other structural weaknesses), including actions to replenish any depleted prefunded financial resources and liquidity arrangements, as necessary to maintain the covered clearing agency's viability as a going concern and to continue its provision of core services, as identified by the covered clearing agency pursuant to Rule 17Ad–26(a)(1). It defines ''orderly wind-down'' to mean the actions of a CCA to effect the permanent cessation, sale, or transfer of one or more of its core services, as identified by the CCA pursuant to Rule 17Ad–26(a)(1), in a manner that would not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system.

[382] *See infra* Part IV.C.1.h (further discussing the benefits and costs associated with the testing requirement) and V.B (further discussing the paperwork burdens associated with Rule 17Ad–26).

[383] Separate from any obligations under Rule 17Ad–22(e)(13) with respect to default management testing, 31 CCPs voluntarily participated in a default management exercise led by CCP Global in 2023 to share best practices, identify areas for follow-on work, and highlight insights from the testing process. Another exercise is planned for 2025. Such efforts suggest that, even where testing efforts require a commitment of time, personnel and resources, CCPs are eager to engage in testing as an effective mechanism to improve their rules, policies and procedures. CCP Global, Default Simulation Exercises by CCPs, *https://ccp-global.org/defaultsimulation/* (describing an exercise completed in 2023).

Including these critical personnel in RWP testing may increase the overall cost of testing but is necessary because these critical personnel are best positioned to identify the planning and procedures that can help ensure timely and effective implementation under real-world conditions.

With respect to whether such testing may be duplicative, commenters also requested clarification as to the extent testing under Rule 17Ad–26(a)(8) could be conducted as part of existing default management testing required under Rule 17Ad–22(e)(13) or business continuity testing required by Commission rules.[384] One commenter stated that it would not object to the proposed frequency of annual RWP testing if it could be combined with existing default testing.[385] Another similarly stated that the RWP and default management testing requirements could be combined into one, noting that both contemplate annual testing.[386] One commenter, citing an operational concern in the potential overlap of the testing requirements, stated that it is unclear RWP testing would differ noticeably from default management testing, and encouraged combining both to reduce the potential for duplicative efforts that would be costly and perfunctory.[387] Citing the potential cost-effectiveness of leveraging existing practices pursuant to default management testing under Rule 17Ad–22(e)(13), another commenter stated that the Commission should more closely harmonize the proposed RWP testing requirement with the requirement in Rule 17Ad–22(e)(13), which would give CCAs flexibility to design testing procedures to properly fit the particular markets, cleared products, and participants that they serve.[388]

As discussed above, regular, annual testing is necessary to facilitate the timely implementation of the RWP when a recovery or wind-down scenario arises, as such scenario is likely to include stressed market conditions where clearing agency participants have defaulted or a non-default loss event that may contribute to market stress, strained organizational resources at the CCA, and market events that progress rapidly. The purpose of such testing is not to be duplicative; rather, it may well be complementary to, for example, the default management testing required by Rule 17Ad–22(e)(13). Accordingly, as explained further below, the Commission is modifying Rule 17Ad–26(a)(8) to explicitly distinguish default management testing from RWP testing because the CCA's role in default management would be distinct from its role implementing a recovery or wind-down.

Nonetheless, as one commenter explained, CCAs may engage in one set of testing exercises designed to address multiple testing procedures or scenarios.[389] Such an approach to harmonizing default management testing with RWP testing is consistent with the requirements of the rule; namely, a CCA can conduct one exercise with multiple tests, such as one that tests both default management and implementation of RWPs. Under Rule 17Ad–26(a)(8), a CCA retains discretion to conduct a single testing exercise intended to address multiple testing requirements under Commission rules, so long as the testing exercise addresses the distinct elements of separate testing requirements, including the possibility that some RWP testing scenarios would include non-default losses, as opposed to losses arising during a CCA's default management process.

For example, rather than conducting a narrow test of ''business as usual'' default management, a CCA may instead choose to conduct a more comprehensive testing exercise intended to cover not only its rules, policies and procedures for default management but scenarios and triggers for loss allocation that would activate the need for a recovery or orderly wind-down. Such an approach may be more efficient than conducting RWP testing that is wholly distinct from default management testing, given that participant defaults can be one of the scenarios or triggers that lead to a recovery or wind-down scenario. A more comprehensive testing exercise may also make it less costly to assemble a representative set of participants and other key stakeholders, as well as the board, producing a more effective testing exercise. As previously discussed above, and in contrast to default management testing, RWP testing may require consideration of scenarios and testing of procedures that go beyond default management because, for example, recovery includes the actions taken to address uncovered losses and replenishment of prefunded resources,[390] and wind-down includes actions taken when resources have been exhausted, necessitating the permanent cessation, sale, or transfer of one or more of the CCA's core services.

Accordingly, as discussed above, and because RWP testing is necessarily distinct from, if in ways complementary to, default management testing under Rule 17Ad–22(e)(13), the Commission is modifying Rule 17Ad–26(a)(8) at adoption to add new language stating, as follows: ''[r]equiring that such testing be in addition to testing pursuant to § 240.17ad–22(e)(13).'' As previously explained, this language clarifies that, although a CCA may choose for efficiency purposes to combine default management and RWP testing into a single exercise, RWP testing should include testing of the procedures specific to its RWP.[391] In addition, the existing requirement regarding default management testing in Rule 17Ad–22(e)(13) is unchanged; it is not replaced or superseded by the separate and distinct requirement for RWP testing.

c. Participation by Clearing Agency Participants and Other Stakeholders

In the RWP Proposing Release, the Commission proposed to require that RWP testing include participation by clearing agency participants and, when practicable, other stakeholders.[392] One commenter stated that involvement of clearing members is not necessarily appropriate for certain scenarios or tools related to general business losses or other non-default losses, and CCAs should have flexibility to determine the appropriate approach to testing and clearing member involvement in such

[384] RWP Proposing Release, *supra* note 18, at 34723–24.

[385] ICE at 4.

[386] The Associations at 21.

[387] CFA at 4.

[388] DTCC at 11.

[389] OCC at 10.

[390] For example, in contrast to a default management exercise, where the CCA likely assumes it has sufficient resources to close out a defaulting participant's portfolio, a recovery plan generally should be formulated on the presumption that any uncovered loss or liquidity shortfall will be borne by the CCA, its owners' and its participants' own resources and provide an effective means of achieving a matched book, where applicable, and a means of replenishing financial resources. *See* CPMI–IOSCO Recovery Guidance, *supra* note 25, at 2.3.1.

[391] To improve readability, the Commission is also adding paragraph headings to the rule and modifying the first reference to ''recovery and wind-down plans'' to the defined terms, so that it instead reads ''recovery and orderly wind-down plans.'' As such, final Rule 17Ad–22(a)(8) reads in full as follows: Include procedures for testing the CCA's ability to implement the recovery and orderly wind-down plans at least every 12 months, including by (a) requiring the CCA's participants and, when practicable, other stakeholders to participate in the testing of its plans, (b) requiring that such testing would be in addition to the testing required in paragraph (e)(13) of 17 CFR 240.17ad–22, (c) providing for reporting the results of the testing to the CCA's board of directors and senior management, and (d) specifying the procedures for, as appropriate, amending the plans to address the results of the testing.

[392] RWP Proposing Release, *supra* note 18, at 34716.

cases.[393] The commenter suggested that the Commission remove or qualify the reference to requiring participant participation in testing.[394] Another commenter stated that direct participation in testing of participants or other stakeholders is not necessarily the most effective way to test and requiring such participation may distract the CCA from optimizing its RWP testing.[395] The commenter explained their inclusion may not be appropriate or beneficial for aspects of an RWP that do not impact them and also stated that testing aspects of an RWP can involve confidential or highly sensitive information that could make the inclusion of clearing members and other stakeholders inappropriate.[396] The commenter stated that there are various other ways in which participants or other stakeholders can be educated in default management and recovery and orderly wind-down processes.[397] In conclusion, the commenter requested that the Commission clarify, for the avoidance of doubt, that testing should not require any participation of clearing member or other stakeholders, as CCAs must retain flexibility to determine how their testing should be conducted, including whether and how to include participants and third-party stakeholders.[398] Another commenter agreed that participants and other stakeholders should be included in tests if any action is required from them as part of the plan; however, such testing should not become unduly onerous for market participants and knowing the significant overlap in member bases at CCAs, consideration should be given that testing be done simultaneously with other CCAs.[399] One commenter stated that it was sensible to require that key external third parties participate.[400] Another commenter recommended that the participation of risk management committees and risk advisory working groups be required, as the market participants on those bodies would possess relevant perspectives and input to ensure that the tests are properly calibrated and administered.[401]

One commenter stated it does not believe that it is appropriate to prescribe a specified approach for the inclusion of CCA participants and, where applicable, other stakeholders in the testing of its RWP.[402] The commenter explained that it is important to recognize the differences in closing out a defaulting member at a CCA that clears cash-settled U.S. securities transactions versus a derivatives clearing agency.[403] Additionally, for a CCA with multiple participant types, the commenter stated it is unclear how each different type of participant would participate in annual testing.[404] The commenter recommends that CCAs be allowed to consider and implement approaches such as training and other educational outreach efforts to members and participants to satisfy any final requirement the Commission adopts for RWP testing.[405] Instead of mandating participation, the commenter recommends that the Commission apply the same guidance to RWP testing as it did for default management testing under Rule 17Ad–22(e)(13)—not specify that participants be included in the testing process, but that some or all participants could be included in some or all of the testing.[406]

Mindful of the requirements under Rule 17Ad–22(e)(13) for testing in the default management context, and consistent with the approach taken by the Commission there, Rule 17Ad–26(a)(8) has the same requirement for participant and other stakeholder involvement in RWP testing. Accordingly, the rule does not specify that all clearing agency participants participate in every test because, particularly for CCAs with large numbers of participants or multiple participant types, it may be impractical or counterproductive from a testing perspective and, as explained by commenters, given the wider range of topics covered as part of RWP planning, it may not always be appropriate to include participants in all aspects of testing.[407] Nonetheless, participation in testing by clearing members helps ensure that clearing members are familiar with the CCA procedures that will be followed in a recovery or wind-down scenario, creating positive feedback where both clearing members and the CCA can plan, share experiences, and consider whether existing plans would, in fact, be viable. While other efforts by a CCA, such as trainings and educational outreach to participants and other stakeholders, may assist in the preparation for recovery and wind-down scenarios, and may also help ensure that participants participate meaningfully in testing exercises, training and other education activities are no substitute for having participants and other categories of stakeholders participate in testing.

In designing its testing plan consistent with Rule 17Ad–26(a)(8), a CCA may choose to designate in its policies and procedures certain participants, or categories of participants, for participation in certain tests. For example, in testing of loss allocation tools, where losses could be assigned to a participant, it may be useful to include participants in the testing to allow them to understand when they can be expected to bear losses and how those losses would be absorbed. In testing that involves business losses or certain types of non-default losses, it may be less appropriate to have participants participate in the testing, though a recovery or wind-down scenario involving a cybersecurity event may benefit from participant testing even if the loss is categorized as a non-default loss. In developing testing scenarios, a CCA may at times also need to use confidential or highly sensitive information that could limit its ability to include clearing participants. In addition, for testing that implicates the risk management framework, such as RWP testing for default loss scenarios, it may be appropriate to facilitate participation by the risk management committee of the board of directors, or other risk committees or advisory working groups organized by the CCA. Over time, a CCA generally should consider how to help ensure that a wide range of participants and other categories of stakeholder have participated in at least those aspects of testing that would affect those participants and other categories of stakeholder so that the participants and

[393] ICE at 5.

[394] *Id.*

[395] CCP12 at 4.

[396] *Id.*

[397] *Id.*

[398] *Id.*

[399] The Associations at 21; *see also* ICE at 4–5 (expressing concern that additional testing requirements could be unnecessarily burdensome, particularly for clearing members who are likely to have testing obligations at multiple clearing organizations).

[400] Davidson at 6 (key external third parties, according to the commenter, may include settlement banks, liquidity providers, clearing members, technology vendors, market-makers, exchanges, and trading venues).

[401] ICI at 9.

[402] DTCC at 9.

[403] *Id.* at 10. In the commenter's view, participant action and awareness of the defaulter's portfolio is not needed in such a case and would be counterproductive to the CCA's need for confidentiality around its market-facing close-out activity. The commenter also stated that cash-market clearing agencies have a relatively large number of participants, meaning that a prescriptive mandate for engagement by all participants in testing would be impractical, cost and resource intensive, and potentially antithetical to the underlying goals of testing. *Id.*

[404] *Id.*

[405] *Id.*

[406] *Id.* at 11.

[407] For example, as discussed in Part II.C.8.d immediately below, testing of orderly wind-down plans may involve a tabletop exercise with the board and senior management focused on the considerations related to, *e.g.,* a bankruptcy filing.

other stakeholders are well informed as to the CCA's policies and procedures regarding recovery and wind-down. The requirements of the rule give discretion to CCAs to identify the appropriate scenarios, participants, and audiences for tests, and for the inclusion of participants and other stakeholders as appropriate so that the testing requirement is not unduly onerous, either on CCAs or their participants and other key stakeholders.

As with Rule 17Ad–22(e)(13), the Commission recognizes that under Rule 17Ad–26(a)(8), a CCA may have limited ability to require participation by all stakeholders in all circumstances, but a CCA generally should make efforts to secure participation of relevant stakeholders, such as liquidity providers or settlement banks. It may also consider including supervisory and resolution authorities as observers. Accordingly, the Commission is not modifying proposed Rule 17Ad–26(a)(8) to remove requirements related to participation by clearing members and other key stakeholders.

d. Testing of Orderly Wind-Down Processes

One commenter requested that the Commission provide additional guidance on how CCAs would implement the wind-down portion of their RWPs.[408] The commenter asked for clarification that end-to-end testing obligations in the proposal do not require testing of steps related to effectuating legal processes and related decision-making, as those steps are operational in nature and do not lend themselves to standardized testing scripts or protocols.[409] Other commenters echoed this statement that legal processes do not lend themselves to standardized testing processes, requesting that CCAs have discretion to determine whether it is necessary or feasible to test.[410]

For the portion of annual testing pertaining to orderly wind-down, a CCA generally should consider that elements of the legal processes associated with a wind-down may vary depending on the circumstances of the scenario and so the CCA may need to decide the order in which services wind down to help ensure an orderly process. In deciding in what order to wind down services, a CCA generally should consider the steps it would need to take to help ensure the wind-down is orderly. Additionally, as part of its orderly wind-down plan, a CCA generally should explore the steps that could achieve recovery and thereby avoid wind-down, to ensure all available tools and resources intended to prevent a wind-down have been exhausted before implementing the orderly wind-down of the CCA. Even though they are operational in nature, this aspect of testing may differ from other testing in that it could involve considering which legal documents to prepare or file, rather than engaging in an exercise that progresses through the CCA's default waterfall and related tools. Wind-down testing may also include, for example, tabletop exercises with senior management that consider when and how to execute bankruptcy proceedings or transfer of core functions to another entity.[411] In addition, a CCA generally should consider whether different wind-down scenarios necessitate that a CCA consider winding down services in different sequences, so that the overall wind-down effort remains orderly across different scenarios.

e. Board Review and Sharing of Testing Results

One commenter agreed that testing results should be provided to the board and senior management of the CCA to enable them to effectively oversee the RWP and its implementation.[412] Another commenter stated that testing results should also be shared with risk advisory committees to ensure that participants are educated and can provide feedback to enhance procedures, as well as with regulatory authorities who can review and challenge the quality of testing scenarios, outputs, and the adequacy of resources.[413]

While the Commission agrees that CCAs generally should consider ways to share information effectively throughout their organizations, as well as with their participants and regulatory authorities, other existing requirements already address the concerns raised by these commenters. For example, Rule 17Ad–25(j) establishes an obligation of the board to solicit and consider viewpoints of participants and other relevant stakeholders, such as through risk advisory committees. Under Rule 17Ad–25(j), each registered clearing agency must establish, implement, maintain, and enforce written policies and procedures reasonably designed to require the board of directors to solicit, consider, and document its consideration of the views of participants and other relevant stakeholders of the registered clearing agency regarding material developments in its risk management and operations on a recurring basis. A CCA generally should consider material changes to, and annual testing of, its RWP as material developments in the CCA's risk management and operations under Rule 17Ad–25(j). In addition, Rule 17Ad–22(e)(23)(ii) also requires a CCA to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the CCA. Under this requirement, a CCA generally should consider the ways in which information regarding its RWP, changes thereto, and testing thereof, should be provided to participants to satisfy the requirements of Rule 17Ad–22(e)(23)(ii). Furthermore, records related to RWP testing would be available to the Commission as records of the CCA pursuant to 17 CFR 240.17a–1, including the results of testing provided to the board pursuant to Rule 17Ad–26(a)(8). In addition, as part of its supervisory program for CCAs, Commission staff generally do participate in existing default management exercises, which also address matters related to RWPs.

9. Board Approval: Rule 17Ad–26(a)(9)

Proposed Rule 17Ad–26(a)(9) required a CCA's RWP to include procedures requiring review and approval by the board of the plans at least every 12 months or following material changes to the CCA's operations that would significantly affect the viability or execution of the plans, with such review informed, as appropriate by the CCA's testing of the plans.

Three commenters supported the proposed approach.[414] In addition, one

[408] DTCC at 9.

[409] DTCC at 11 (explaining that, as a practical matter for a CCA, other than internal governance requirements necessary to determine whether to trigger the implementation of the orderly wind-down plan, implementation would include preparation of Bankruptcy Court filings, the provisioning of legal advice as a result of entering into the bankruptcy process, and then entering into various agreements and other processes that are operational in nature).

[410] CCP12 at 4–5; OCC at 11, n.27 (stating that some aspects of an RWP do not lend themselves to full simulation testing in any event, such as the contemplation of a potential transaction with an as-yet-identified third-party for a merger or acquisition).

[411] A CCA designated systemically important also generally should consider the extent to which recovery and wind-down scenarios may result in resolution by the resolution authority pursuant to Title II.

[412] OCC at 10.

[413] The Associations at 21.

[414] OCC at 11 (also supporting the fact that the cadence of testing matches that of board review); The Associations at 22 (citing the importance of RWPs to the overall business of the CCA); Davidson at 12.

commenter stated that the board should consult with the risk management committee when developing or amending its RWP.[415] Commission rules already require the board of a registered clearing agency to establish a risk management committee to assist the board in overseeing the risk management of the registered clearing agency.[416] Given that many elements of the RWP would closely implicate the risk management of a CCA, and that the risk management committee is a committee of the board, a CCA generally should consider whether and how the risk management committee should assist in the review and approval of material changes to RWPs and review of RWP testing results. Accordingly, because Rule 17Ad–26(a)(9) already requires the board to review and approve the RWP, it is unnecessary to separately also require the board to consult the risk management committee as part of its review and approval.

Consistent with the above, the Commission is adopting the rule as proposed, with two technical modifications to improve clarity.[417]

10. Other Comments

a. Harmonization With CFTC Proposal

Several commenters recommended that the Commission and CFTC coordinate to ensure that any final rules are aligned or structured so that dually registered entities (*i.e.,* CCAs registered with the Commission and SIDCOs registered with the CFTC) can efficiently comply with both Commission and recently proposed CFTC rules,[418] which two of these commenters stated include more prescriptive elements than the Commission's proposed rules.[419]

In developing Rule 17Ad–26, and consistent with its obligations under Title VIII of the Dodd-Frank Act, the Commission has consulted with the CFTC to ensure that regulatory requirements are effective and consistent.[420] The Commission's final Rule 17Ad–26 is highly aligned with the CFTC's proposal. While commenters have identified some aspects of the CFTC's approach that differ in terms of the level of granularity, prescriptiveness, or in the use of particular language, these differences generally result from differences in historical approach or regulatory scope between the Commission and CFTC. For example, requirements proposed by the CFTC identify specific scenarios beyond those described in Rule 17Ad–26(a)(3), which focuses on scenarios involving uncovered credit losses, uncovered liquidity shortfalls, and general business losses, consistent with other requirements in Rule 17Ad–22. Such differences reflect non-substantive differences in approach between SIDCO regulations and the Commission's rules for CCAs, and it is important for the Commission's regulatory framework to align the new requirements in Rule 17Ad–26 with existing requirements in Rule 17Ad–22. In addition, the Commission's approach reflects the range of markets served and products cleared by CCAs and the principles-based approach generally taken in both Rule 17Ad–22 and new Rule 17Ad–26. As with the other requirements set forth in rules for CCAs, which are also consistent with comparable CFTC rules,[421] the requirements in Rule 17Ad–26 related to the scenarios that might be implicated, and the tools that would be applied, in a recovery or wind-down scenario necessarily depend, in part, on the risk profile of the products cleared and the structure of the markets served. Accordingly, such differences in approach as to the granularity of certain requirements are, as one commenter stated, non-substantive,[422] and as such could not result in conflicting or confusing regulatory requirements for dually registered clearinghouses.

b. International Standards

One commenter, addressing the discussion in the RWP Proposing Release stating that CCAs consider new policy statements from standard-setting bodies, asked the Commission to reaffirm that international policy statements are non-binding guidance and considering when and how to implement such non-binding guidance remains within the discretion of the CCA.[423]

As a general matter, international standing-setting bodies provide guidance that is helpful for regulatory authorities to consider when establishing and implementing changes to their regulatory frameworks in their respective jurisdictions. While not required by the rule, as discussed in the RWP Proposing Release, CCAs generally should consider policy statements and other guidance issued by standard-setting bodies when reviewing and considering updates to their rules, policies, and procedures related to RWPs.[424]

c. Other Topics

One commenter reiterated its recommendation that the Commission impose very restrictive investment and credit policies for CCA margin and default funds.[425] Preexisting Commission rules already establish requirements designed to minimize custody and investment risk consistent with international standards.[426] Specifically, Rule 17Ad–22(e)(16) requires a CCA to establish, implement, maintain and enforce written policies and procedures reasonably designed to safeguard the CCA's own and its participants' assets, minimize the risk of loss and delay in access to these assets, and invest such assets in instruments with minimal credit, market, and liquidity risks.[427] This requirement applies to margin and guaranty fund contributions held by the CCA on behalf of its participants.

Another commenter stated that RWPs should allow for positions to be ported to other CCAs.[428] Preexisting Commission rules already establish requirements for segregation and portability consistent with international standards.[429] Specifically, Rule 17Ad–22(e)(14) requires a CCA to establish, implement, maintain and enforce

[415] ICI at 8.

[416] 17 CFR 240.17ad–25(d)(1).

[417] The Commission is making two technical modifications to the rule: for clarity and grammatical correctness, the final rule text modifies the phrase ''review and approval by the board of directors of the plans'' to ''review and approval of the plans by the board of directors of the covered clearing agency'' and includes an additional comma after the phrase ''as appropriate'' and before ''by the CCA's testing of the plans.''

[418] ICE at 5; ICI at 5 (also stating that, although the Commission and CFTC proposals differ regarding non-substantive matters, such differences may cause confusion and redundancy regarding the standards for RWPs and result in inefficiencies and harmonization would better facilitate compliance and consistency, certainty, and efficiency); OCC at 5, n.14; The Associations at 12; SIFMA at 5. The Options Clearing Corporation (''OCC'') and ICE Clear Credit (''ICC'') are each a CCA that is also registered as a SIDCO with the CFTC. *See infra* Part IV.B.1 (further describing each of the CCAs registered with the Commission).

[419] OCC at 5, n.14; ICI at 5.

[420] *See supra* note 43 (explaining that Commission staff communicate with the CFTC staff regularly and has consulted on the respective proposed rules regarding RWPs specifically).

[421] CCA Standards Adopting Release, *supra* note 5, at 70795 (explaining that ''the Commission has consulted with the CFTC, FRB, and FSOC in the development of [Rule 17Ad–22(e)] to, in part, avoid unnecessarily duplicative or inconsistent regulation with respect to clearing agencies that are dually registered'' and that ''because Rule 17Ad–22(e) and other comparable regulations—including those of the CFTC—are based on the same international standards, the potential for inconsistent regulation is low'') (citation omitted).

[422] ICI at 5.

[423] DTCC at 12.

[424] RWP Proposing Release, *supra* note 18, at 34724.

[425] SRC at 6.

[426] *See supra* note 421 (discussing the same).

[427] 17 CFR 240.17ad–22(e)(16).

[428] The Associations at 5.

[429] *See supra* note 421 (discussing the same).

written policies and procedures reasonably designed to enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCA with respect to those positions and effectively protect such positions and related collateral from the default or insolvency of that participant.[430]

One commenter requested that the Commission and CFTC continue to move forward with important regulatory reforms to address several other areas related to clearinghouses, including CCP margin methodologies, CCP transparency and disclosures, CCP liquidity risk and stress testing, and CCP capital and SITG.[431] Each such topic is the subject of or closely related to existing workstreams underway at the Basel Committee on Banking Supervision,[432] CPMI–IOSCO,[433] and the FSB,[434] and Commission staff currently participate in each.

Another commenter remains concerned with challenges resulting from the concentration of exposures at CCAs, stating that such concentration could potentially jeopardize the priorities for efficient clearing, settlement, and payment functions that CCAs must ensure pursuant to Title VIII of the Dodd-Frank Act.[435] As discussed in Part I,[436] the Commission has long acknowledged that, while central clearing and other important functions provided by CCAs generally benefit the markets they serve, CCAs can also pose systemic risk due in part to the fact that the clearing function concentrates risk. To mitigate this potential risk, the Commission has adopted a series of rules since the enactment of the Dodd-Frank Act designed to promote the resilience of CCAs. These rules include Rule 17Ad–22(e), which sets forth standards for CCAs that address all aspects of a CCA's operations, including financial risk management, operational risk, default management, governance, and participation requirements.[437] These features of the regulatory framework, made more robust by the requirements adopted in this release, help ensure that CCAs benefit the markets they serve and do not create contagion events that could pose a systemic danger to the U.S. financial system.

D. Defined Terms in Rule 17Ad–26

1. Definition of ''Orderly Wind-Down''

Proposed Rule 17Ad–26(b) defined ''orderly wind-down'' to mean the actions of a CCA to effect the permanent cessation, sale, or transfer of one or more of its critical services in a manner that would not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system.

In the RWP Proposing Release, the Commission explained that the proposed definition would help identify the specific goals of an orderly wind-down: that the actions of a CCA should not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system, and that these actions would serve as a final and binding solution to whatever circumstance necessitated the wind-down (*i.e.,* not a temporary stopgap measure).[438] These considerations help distinguish the difference between an *orderly* wind-down, as opposed to a wind-down where the goal is to cease operations as quickly as possible. As discussed in the RWP Proposing Release, to be orderly, a wind-down generally should include providing notice to participants sufficient to allow them to transition to alternative arrangements in an orderly manner, as well as maintaining the operation of the CCA's critical services.[439] Moreover, for a wind-down involving the sale or transfer of all or a portion of the CCA to be orderly, the CCA generally should consider the separability of the parts of the CCA and whether there are certain portions of the CCA's business that could be sold or transferred as separate businesses.[440]

a. Meaning of ''Orderly''

Two commenters expressed the view that, despite the best efforts of all involved, a distressed CCA may be unable to wind-down in an ''orderly'' manner without increasing the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets, thereby threatening the stability of the U.S. financial system.[441] As the Commission acknowledged in the CCA Standards Adopting Release, wind-down may not always be advisable, and strategies based on recovery (rather than wind-down) may prove more feasible or workable in certain circumstances.[442] Nonetheless, one purpose of Rule 17Ad–22(e)(3)(ii)—and now also of Rule 17Ad–26—is to ensure that CCAs have developed sufficient *plans* for both recovery and orderly wind-down to facilitate effective engagement and decision-making with its supervisory and resolution authorities as they consider implementing their RWPs. Key to such engagement is ensuring that planning by the CCA has considered a range of scenarios, across circumstances that include both recovery and wind-down. Such planning, therefore, generally should focus on identifying strategies that can facilitate wind-down while mitigating to the greatest extent possible the risk of significant liquidity, credit, or operational problems spreading to other entities. Accordingly, in the CCA Standards Adopting Release, the Commission reiterated the importance of having plans for both recovery and orderly wind-down, explaining that a CCA generally should consider many factors across a range of potential considerations related to recovery and wind-down, including consideration of which options may be the most workable.[443] Importantly, final Rule 17Ad–26 requires *planning* for an orderly wind-down, having considered significant liquidity, credit, or operational problems spreading among financial institutions or markets should a wind-down become necessary. It also requires timely implementation of the RWP so that the CCA, participants in the clearing agency, and other stakeholders, including its supervisory and resolution authorities, can assess the impact of different scenarios. Such planning will be most effective when the CCA considers ways to effect the permanent cessation, sale, or transfer of one or more of its services in a manner that would not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S.

[430] 17 CFR 240.17ad–22(e)(14).

[431] ICI at 11.

[432] *See supra* note 14 and accompanying text (citing papers prepared by CPMI–IOSCO in coordination with the BCBS on topics related to CCP margin).

[433] *See supra* notes 14, 25, 29 and accompanying text (citing guidance prepared by CPMI–IOSCO on CCP resilience and recovery).

[434] *See supra* notes 24 and 29 and accompanying text (citing analysis and guidance prepared by the FSB on CCP resolution).

[435] SRC at 4.

[436] *See supra* note 8 and accompanying text.

[437] *See supra* note 12 and accompanying text.

[438] RWP Proposing Release, *supra* note 18, at 34718.

[439] *Id.*

[440] *Id.* at 34718.

[441] ICE at 3, n.6 (explaining that while the goal of any wind-down should be to minimize such problems, the commenter did not believe the possibility of increased risk should disqualify a wind-down from being ''orderly''); *see also* DTCC at 11–12 (stating that it is impossible for either a CCA or its RWP to *ex ante* guarantee that contagion will not occur or that the U.S. financial system will not be impacted).

[442] CCA Standards Adopting Release, *supra* note 5, at 70808.

[443] *Id.*

financial system. Accordingly, it is appropriate for the final rule to require planning designed to effect an orderly wind-down that mitigates the risk of significant liquidity, credit, or operational problems arising from the wind-down scenario.

b. Applying a ''Reasonably Designed'' Standard

One of the commenters recommended that the Commission modify the definition to incorporate a ''reasonably designed'' standard, suggesting that the definition be revised to state ''in a manner that is *reasonably designed* to not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system, while seeking the continuity of critical services provided by the CCA and limiting any related disruptions'' (emphasis added) (hereinafter the ''in a manner'' clause).[444]

With respect to requiring that an orderly wind-down be ''reasonably designed,'' Rule 17Ad–22(e)(3)(ii) already applies a ''reasonably designed'' standard for the development of RWPs.[445] Accordingly, a CCA must establish, implement, maintain and enforce written policies and procedures reasonably designed to, as applicable, include plans for the recovery and orderly wind-down of the CCA necessitated by credit losses, liquidity shortfalls, losses from general business risk, or any other losses.[446] This ''reasonably designed'' standard effects the outcome desired by the commenter, and adding a second ''reasonably designed'' standard into the definition of ''orderly wind-down'' would make the definition less clear, since the definition itself only defines what constitutes an ''orderly'' wind-down. Accordingly, the Commission is retaining the ''in a manner'' clause as proposed.

c. Feasibility of Wind-Down

One commenter stated that wind-down of a CCA is infeasible because suitable alternatives do not exist and the time it would take to establish or transfer critical functions to a ''bridge'' or new entity would cause permanent damage to the markets served by the CCA.[447] When the Commission adopted preexisting Rule 17Ad–22(e), which includes in paragraph (e)(3)(ii) the requirement for CCAs to have RWPs, it addressed comments expressing concern with the feasibility of winding down a CCA. As explained above, the Commission reiterated in the CCA Standards Adopting Release the importance of having plans for both recovery and orderly wind-down, explaining that a CCA generally should consider many factors in a range of potential considerations related to recovery and orderly wind-down, including consideration of which options may be the most feasible or workable.[448] One commenter to the CCA Standards Adopting Release, representing three CCAs, stated its view that, while CCAs should analyze the feasibility of an orderly wind-down in their plans and include it when appropriate, in the commenter's view, recovery strategies (rather than wind-down) most effectively promote financial stability, ensure the continuation of services, and distribute losses in a fair and economically efficient manner.[449] The Commission continues to agree that the steps to be taken in a recovery or wind-down scenario must promote financial stability, the continuity of systemically important services, and the fair and efficient allocation of losses.[450] Consistent with this view, the requirements related to orderly wind-down in Rule 17Ad–26 include elements focused on planning and timely implementation, to help ensure that, if a CCA were to enter recovery or become unable to continue as a going concern, the relevant supervisory authorities, and, in the case of a resolution, the relevant resolution authorities, could rely on the planning set forth in the CCA's RWPs. Such elements can help those authorities evaluate the most effective course of action under the circumstances while ensuring that systemically important functions continue to serve the affected markets.[451] Accordingly, the definition of ''orderly wind-down'' seeks to identify those circumstances where a permanent cessation, sale, or transfer of one or more of its critical services could occur in a manner that would not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets. In this way, although it may be unworkable to fully wind down systemically important functions provided by a CCA such that markets lose continuity of access to these functions, planning for the orderly wind-down of a CCA can help ensure that the CCA itself, as well as the markets it serves, have planned for and developed the mechanisms that can facilitate the continuity of such systemically important functions even if the CCA itself is unable to continue as a going concern. The Commission is therefore adopting the definition of ''orderly wind-down'' in final Rule 17Ad–26 as proposed, with certain technical modifications to ensure consistency across the elements of Rule 17Ad–26, as discussed immediately below.

d. Other Modifications for Consistency

The Commission is modifying the definition of ''orderly wind-down'' to ensure consistency with other modifications made in Rule 17Ad–26 with respect to the defined term ''service providers for core services,'' as discussed above. Accordingly, the Commission is replacing the reference to ''critical services'' in the proposed definition with ''core services, as identified by the covered clearing agency pursuant to paragraph (a)(1) of this section.'' As such, final Rule 17Ad–26(b) defines ''orderly wind-down'' to mean the actions of a CCA to effect the permanent cessation, sale, or transfer of one or more of its core services, as identified by the CCA pursuant to Rule 17Ad–26(a)(1), in a manner that would not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system.

2. Other Defined Terms and Introductory Clause

In addition to the definition of ''orderly wind-down,'' the Commission proposed definitions for the terms ''affiliate,'' ''recovery,'' and ''service provider.''

The definition of ''affiliate'' as proposed meant a person that directly or indirectly controls, is controlled by, or is under common control with the CCA. The Commission received no comments on this definition and is adopting the definition of ''affiliate'' as proposed.

The definition of ''recovery'' as proposed meant the actions of a CCA, consistent with its rules, procedures, and other *ex ante* contractual arrangements, to address any uncovered loss, liquidity shortfall, or capital

[444] DTCC at 11–12.

[445] 17 CFR 240.17ad–22(e)(3)(ii).

[446] *Id.*

[447] Davidson at 1 (''It is simply not possible, as a practical matter, to 'resolve' a systemically important financial market utility. They must be 'recovered.' '').

[448] CCA Standards Adopting Release, *supra* note 5, at 70808.

[449] *Id.*

[450] *See supra* note 442 (stating the same).

[451] For example, the RWP would include information that can assist the resolution authority in the context of resolution planning.

inadequacy, whether arising from participant default or other causes (such as business, operational, or other structural weaknesses), including actions to replenish any depleted prefunded financial resources and liquidity arrangements, as necessary to maintain the CCA's viability as a going concern and to continue its provision of critical services. The Commission received no comments on this definition. To align this definition with modifications to paragraph (a)(1) of Rule 17Ad–26, as well as corresponding modifications to the definitions of ''service provider for core services'' and ''orderly wind-down,'' the Commission is modifying the definition of ''recovery'' at adoption by replacing the language regarding ''critical services'' with ''core services, as identified by the covered clearing agency pursuant to paragraph (a)(1) of this section.'' Accordingly, as adopted, the definition of ''recovery'' means the actions of a CCA, consistent with its rules, procedures, and other *ex ante* contractual arrangements, to address any uncovered loss, liquidity shortfall, or capital inadequacy, whether arising from participant default or other causes (such as business, operational, or other structural weaknesses), including actions to replenish any depleted prefunded financial resources and liquidity arrangements, as necessary to maintain the CCA's viability as a going concern and to continue its provision of core services, as identified by the CCA pursuant to Rule 17Ad–26(a)(1).

The definition of ''service provider'' as proposed meant any person, including an affiliate or a third party, that is contractually obligated to the CCA in any way related to the provision of critical services, as identified by the CCA in 17 CFR 240.17ad–26(a)(1). Several commenters stated that the proposed definition was overly broad, capturing service providers that would not directly support critical services, and that it would be burdensome to map to such a wide scope of service providers to critical services.[452] Commenters made suggestions to narrow the scope of the definition, several of which the Commission is adopting,[453] as discussed in Parts II.C.1 and 2.

To narrow the scope of the definition and consistent with the changes previously discussed in Parts II.C.1 and 2 regarding Rule 17Ad–26(a)(1) and (2), the Commission is modifying the defined term ''service provider'' to be ''service provider for core services.'' The Commission is also modifying the definition to narrow the scope to include only those services providers that have a written agreement to provide, on an ongoing basis, services that directly support the core services of the CCA. Specifically, the Commission is replacing the clause ''any person . . . that is contractually obligated to the CCA in any way related to the provision of critical services'' with ''any person . . . that, through a written agreement for services provided to or on behalf of the CCA, on an ongoing basis, directly supports the delivery of core services[.]'' [454] These changes closely link the scope of ''service providers'' with the requirement in Rule 17Ad–26(a)(1) to identify core services. The modifications to the definition also align the approach in Rule 17Ad–26 with the approach in existing Rule 17Ad–25, which establishes requirements, in part, for the board of directors of a registered clearing agency to oversee service providers for core services.

Finally, the Commission is also modifying the introductory clause of paragraph (b) of Rule 17Ad–26 to state: ''All terms used in this section have the same meaning as in the Securities Exchange Act of 1934, and, unless the context otherwise requires, the following definitions apply for purposes of this section[.]'' This modification clarifies that the terms defined in Rule 17Ad–26(b) are for the purpose of Rule 17Ad–26 and intended to be consistent with terms used in the Exchange Act.

III. Compliance Date

The Commission did not receive any comments regarding compliance dates for the proposed rule amendments and new rules being adopted in this release.[455] The Commission is adopting two compliance dates regarding these final rule amendments and new rules, as follows: (1) each covered clearing agency will be required to file with the Commission any proposed rule changes required under Rule 19b–4 and any Advance Notices required under Title VIII of the Dodd-Frank Act and Rule 19b–4(n) no later than April 17, 2025, and (2) the proposed rule changes and the Advance Notices must be effective by December 15, 2025. These compliance dates provide sufficient time for CCAs to consider changes to their rules, policies, and procedures necessary to ensure consistency with the rules amended and adopted in this release because, as discussed above and further in the Economic Analysis and Paperwork Reduction Act analysis below, CCAs generally have policies and procedures consistent with many of the elements of the final amendments to 17Ad–22(e)(6) and new Rule 17Ad–26. As such, while these new requirements likely require a CCA to review and update existing policies and procedures, it does not require a CCA to develop new systems, technologies, or processes. Because these rules promote iterative and incremental updates to existing policies and procedures, generally based on existing practices at some or all of the current set of CCAs, these compliance dates provide a sufficient time period to facilitate the filing, publication, and Commission review and approval, as appropriate, of any incremental changes to policies and procedures consistent with the processes for proposed rule changes under Rule 19b–4 and Advance Notices under Title VIII and Rule 19b–4(n).

IV. Economic Analysis

A. Introduction

The Commission is sensitive to the economic consequences and effects of the final rule and amendments, including their benefits and costs.[456] Since the final rule and amendments could require a CCA to adopt new policies and procedures, the Commission acknowledges that the development and implementation of those new policies and procedures will have economic effects.

This section addresses the economic effects of the final rule and amendments, including their anticipated and estimated benefits and costs and their effects on efficiency, competition, and capital formation. It is not feasible to quantify many of the

[452] DTCC at 6; ICC at 3–4; OCC at 6–7; CCP12 at 3.

[453] DTCC at 7; ICC at 4.

[454] The Commission is also making a technical edit to the definition of ''service provider for core services'' in final Rule 17Ad–26(b): replacing ''in 17 CFR 240.17ad–26(a)(1)'' with ''pursuant to paragraph (a)(1) of this section.''

[455] In determining compliance dates, the Commission considers the benefits of the rules as well as the costs of delayed compliance dates, and potential overlapping compliance dates. For the reasons discussed throughout the release, to the extent that there are costs from overlapping compliance dates, the benefits of the rule justify the costs. *See infra* sections IV.B. and IV.C.3 in the Economic Analysis for a discussion of the interaction of the final rule with certain other Commission rules.

[456] Under section 3(f) of the Exchange Act, whenever the Commission engages in rulemaking under the Exchange Act and is required to consider or determine whether an action is necessary or appropriate in the public interest, it must consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f). In addition, section 23(a)(2) of the Exchange Act prohibits the Commission from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act. *See* 15 U.S.C. 78w(a)(2).

benefits and costs. For example, risk management is an area of key concern for all clearing agency stakeholders. Perceptions of risk affect how clearing agencies are operated, and those operations, in turn, affect perceptions of risk. Any change to the policies and procedures about how clearing agencies act in times of crisis affects the behavior of clearing agencies and participants in complex ways not only during a crisis but also before the crisis, and those behavioral changes may affect the likelihood and severity of a crisis. While the Commission has attempted to quantify economic effects where possible, much of the discussion of economic effects is qualitative in nature. The Commission also discusses the potential economic effects of certain alternatives to the final rule and amendments.

B. Economic Baseline

To consider the effect of the final rule and amendments, the Commission first explains the current situation in the market (*i.e.,* the economic baseline). All the benefits and costs of the final rule and amendments are calculated relative to the economic baseline. The economic baseline in this analysis considers: (1) the current market for CCA activities, including the number of CCAs, the distribution of participants across these clearing agencies, and the level of activity these clearing agencies process; (2) the current regulatory framework for CCAs; (3) the current recovery and orderly wind-down plans of CCAs; and (4) the current risk-based margin systems of CCAs. The Commission did not receive any comments on the economic baseline.

We have considered the potential effects on entities that are implementing other recently adopted rules during the compliance period for these amendments. Recently adopted rules that may place compliance obligations on some of the same entities with obligations under these amendments include the 17 CFR 240.10c–1a (''Rule 10c–1a'') Adopting Release,[457] the CA Governance Adopting Release,[458] and the Treasury Clearing Adopting Release.[459]

1. Description of Market

Of the eight registered clearing agencies, six are currently in operation.[460] Five provide central counterparty (''CCP'') services,[461] and one provides central securities depository (''CSD'') services.[462] National Securities Clearing Corporation (''NSCC''), Fixed Income Clearing Corporation (''FICC''), and Depository Trust Company (''DTC'') are all CCAs that are subsidiaries of Depository Trust & Clearing Corporation (''DTCC''). NSCC offers clearance and settlement services for equities, corporate and municipal debt, American depositary receipts, exchange traded funds, and unit investment trusts (''UITs''). FICC's Mortgage-Backed Securities Division (''MBSD'') provides clearing, netting, and risk management services for trades in the mortgage-backed securities market. FICC's Government Securities Division (''GSD'') provides clearing,

[457] *Reporting of Securities Loans,* Release No. 34–98737 (Oct. 13, 2023) [88 FR 75644 (Nov. 3, 2023)] (''Rule 10c–1a Adopting Release''). This rule requires any covered person who agrees to a covered securities loan on behalf of itself or another person to report specified information about the covered securities loan to a registered national securities association (currently FINRA is the only registered national securities association)—or rely on a reporting agent to do so—and requires the registered national securities association to make certain information it receives available to the public. Covered persons will include market intermediaries, securities lenders, and broker-dealers, while reporting agents include certain brokers, dealers, or registered clearing agencies. The rule's compliance dates required that the registered national securities association propose rules pursuant to Rule 10c–1a(f) by May 2, 2024, and the proposed rules shall be effective no later than Jan. 2, 2025; that covered persons report Rule 10c–1a information to a registered national securities association on or by Jan. 2, 2026 (which requires that the registered national securities association have implemented data retention and availability requirements for reporting); and that the registered national securities association publicly report Rule 10c–1a information by Apr. 2, 2026. *See* Rule 10c–1a Adopting Release, section VIII.

[458] CA Governance Adopting Release, *supra* note 12. The CA Governance Adopting Release establishes Rule 17Ad–25 for new governance requirements for registered clearing agencies. These include requirements for independent directors and for the composition of a registered clearing agency's board of directors, nominating committee, and risk management committee; requirements to identify and document existing or potential conflicts of interest involving directors or senior managers, and mitigate or eliminate and document the mitigation or elimination of such conflicts; and requirements for policies and procedures obligating directors to report conflicts of interest, managing risks from relationships with service providers, and requiring boards to solicit, consider, and document their consideration of the views of participants and other relevant stakeholders. The compliance date for Rule 17Ad-25 is Dec. 5, 2024, except that the compliance date for the independence requirements of the board and board committees in Rules 17Ad–25(b)(1), (c)(2), and (e) is Dec. 5, 2025. *See* CA Governance Adopting Release, section III.

[459] Treasury Clearing Adopting Release, *supra* note 62. Among other things, the amendments require CCAs for U.S. Treasury securities to have written policies and procedures reasonably designed to require that every direct participant of the CCA submit for clearance and settlement all eligible secondary market transactions in U.S. Treasury securities to which it is a counterparty. The compliance date was Mar. 18, 2024, for CCAs to file any proposed rule changes pursuant to Rule 17Ad–22(e)(6)(i) and (e)(18)(iv)(C) and 17 CFR 240.15c3–3 (''Rule 15c3–3''), which must be effective by Mar. 31, 2025. With respect to the changes to Rule 17Ad–22(e)(18)(iv)(A) and (B), (i) CCAs were required to file any proposed rule changes regarding those amendments no later than June 14, 2024, and (ii) those changes must be effective by Dec. 31, 2025, for cash market transactions encompassed by section (ii) of the definition of an eligible secondary market transaction, and by June 30, 2026, for repo transactions encompassed by section (i) of the definition of eligible secondary market transactions. Finally, the Commission amended the broker-dealer customer protection rule to permit margin required and on deposit with CCAs for U.S. Treasury securities to be included as a debit in the reserve formulas for accounts of customers and proprietary accounts of broker-dealers, subject to certain conditions. Compliance by the direct participants of a U.S. Treasury securities CCA with the requirement to clear eligible secondary market transactions is not required until Dec. 31, 2025, and June 30, 2026, respectively, for cash and repo transactions. *See* Treasury Clearing Adopting Release, section III.

[460] There are two registered but inactive clearing agencies: Boston Stock Exchange Clearing Corporation (''BSECC'') and Stock Clearing Corporation of Philadelphia (''SCCP''). Neither has provided clearing services in well over a decade. *See* Self-Regulatory Organizations; The Boston Stock Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the Articles of Organization and By-Laws, Exchange Act Release No. 63629 (Jan. 3, 2011), 76 FR 1473, 1474 (Jan. 3, 2011) (BSECC ''returned all clearing funds to its members by September 30, 2010, and [ ] no longer maintains clearing members or has any other clearing operations as of that date. [ ] BSECC [ ] maintain[s] its registration as a clearing agency with the Commission for possible active operations in the future.''); Self-Regulatory Organizations; Stock Clearing Corporation of Philadelphia; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to the Suspension of Certain Provisions Due to Inactivity, Exchange Act Release No. 63268 (Nov. 8, 2010), 75 FR 69730, 69731 (Nov. 15, 2010) (SCCP ''returned all clearing fund deposits by September 30, 2009; [and] as of that date SCCP no longer maintains clearing members or has any other clearing operations. [ ] SCCP [ ] maintain[s] its registration as a clearing agency for possible active operations in the future.''). Because they do not provide clearing services, BSECC and SCCP are not included in the economic baseline or the consideration of benefits and costs. ICE Clear Europe Limited withdrew its registration in Nov. 2023. *See* Exchange Act Release No. 98902 (Nov. 9, 2023), 88 FR 78428 (Nov. 15, 2023).

[461] A CCP is a type of registered clearing agency that acts as the buyer to every seller and the seller to every buyer, providing a trade guaranty with respect to transactions submitted for clearing by the CCP's participants. *See supra* note 6. A CCP may perform a variety of risk management functions to manage the market, credit, and liquidity risks associated with transactions submitted for clearing. For example, CCPs help manage the effects of a participant default by closing out the defaulting participant's open positions and using financial resources available to the CCP to absorb any losses. In this way, the CCP can prevent the onward transmission of financial risk. *See, e.g.,* Shortening the Securities Transaction Settlement Cycle, Exchange Act Release No. 94196 (Feb. 9, 2022), 87 FR 10436, 10448 (Feb. 24, 2022).

[462] A CSD is a type of registered clearing agency that acts as a depository for handling securities, whereby all securities of a particular class or series of any issuer deposited within the system are treated as fungible. Through use of a CSD, securities may be transferred, loaned, or pledged by bookkeeping entry without the physical delivery of certificates. A CSD also may permit or facilitate the settlement of securities transactions more generally. *See supra* note 6.

netting, and risk management services for trades in U.S. Government debt, including buy-sell transactions and repurchase agreement transactions. DTC provides end-of-day net settlement for clients, processes corporate actions, provides securities movements for NSCC's net settlements, and it provides settlement for institutional trades.

ICE Clear Credit LLC (''ICC'') is a CCA for credit default swaps (''CDS''), and it is a subsidiary of Intercontinental Exchange, Inc. (''ICE''). LCH SA is another CCA that offers clearing for CDS, and it is a France-based subsidiary of LCH Group Holdings Ltd, which, in turn, is majority owned by the London Stock Exchange Group plc. The sixth CCA, Options Clearing Corporation (''OCC''), offers clearing services for exchange-traded U.S. equity options.

CCAs operate under one of two broad ownership models. In one model, the CCA is member-owned,[463] while in the other model, the CCA is publicly traded.[464]

CCAs currently operate specialized clearing services and face limited competition in their markets.[465] For each of the following asset classes, for example, there is only one CCA serving as a central counterparty: exchange-traded equity options (OCC), government securities (FICC), mortgage-backed securities (FICC), and equity securities (NSCC). There is also only one CCA providing central securities depository services (DTC). CCA activities exhibit high barriers to entry and economies of scale.[466] These features of the existing markets, and the resulting concentration of clearing and settlement services within a handful of entities, inform the Commission's examination of the effects of the final rule and amendments on competition, efficiency, and capital formation (see Part IV.C.3). Table 1 summarizes the most recent data on the number of participants at each CCA.[467]

TABLE 1[a]—NUMBER OF PARTICIPANTS AT CCAS IN AUGUST 2024

CCA	Number of participants
Subsidiaries of The Depository Trust & Clearing Corporation:	.....
National Securities Clearing Corporation[b]	4,502
The Depository Trust Company[c]	877
Fixed Income Clearing Corporation (Government Securities Division)[d]	220
Fixed Income Clearing Corporation (Mortgage Backed Securities Division)[e]	139
Subsidiaries of Intercontinental Exchange:	
ICE Clear Credit[f]	31
Subsidiaries of LCH:	
LCH SA (CDSClear Participants Only)[g]	26
The Options Clearing Corporation[h]	181

[a] Participant statistics were taken from the websites of each of the listed clearing agencies in Aug. 2024.
[b] DTCC, *NSCC Member Directories, available at http://www.dtcc.com/client-center/nscc-directories.*
[c] DTCC, *DTC Member Directories, available at http://www.dtcc.com/client-center/dtc-directories.*
[d] DTCC, *FICC–GOV Member Directories, available at http://www.dtcc.com/client-center/ficc-gov-directories.*
[e] DTCC, *FICC–MBS Member Directories, available at http://www.dtcc.com/client-center/ficc-mbs-directories.*
[f] ICE, *ICE Clear Credit Participants, available at https://www.theice.com/clear-credit/participants.*
[g] LCH, *LCH SA Membership, available at https://www.lch.com/membership/member-search.*
[h] OCC, *Member Directory, available at http://www.theocc.com/Company-Information/Member-Directory.*

CCAs have become an essential part of the infrastructure of the U.S. securities markets due to their role as intermediaries. Over the last several years, CCAs have become increasingly important in financial markets as they clear an increasing fraction of market transactions.[468] For example, in the 12-month period from October 2021 to September 2022, approximately 65 percent, or $1.3 trillion notionally, of all single-name CDS transactions in the United States were centrally cleared,[469] and the Commission adopted in December 2023 rule changes which, among other things, require CCAs for U.S. Treasury securities to have written policies and procedures reasonably designed to require that every direct participant of the CCA submit for clearance and settlement all eligible secondary market transactions in U.S. Treasury securities to which it is a counterparty.[470] The average daily value of equities trades cleared by NSCC in 2023 was $1.9 trillion; at FICC, the total net value of government securities transactions in 2023 was $2,019 trillion and the total net par value for mortgage backed securities in 2023 was $58 trillion; and the total value of transactions settled by DTC in 2023 was $446 trillion.[471] In addition, in 2023,

[463] *See, e.g.,* Release No. 34–52922 (Dec. 7, 2005), 70 FR 74070 (Dec. 14, 2005) (explaining that participants of DTC, FICC, and NSCC that make full use of the services of one or more of these clearing agency subsidiaries of DTCC are required to purchase DTCC common shares).

[464] OCC is owned by certain options exchanges, which are all publicly traded. ICC is a subsidiary of ICE (a publicly traded company). LCH SA is a subsidiary of LCH Group Holdings, Ltd., which is majority-owned by London Stock Exchange Group plc (a publicly traded company).

[465] *See* SIFMA at 10.

[466] *See* Alistair Milne, *Central Securities Depositories and Securities Clearing and Settlement: Business Practice and Public Policy Concerns, in* Analyzing the Economics of Financial Market Infrastructures 334, 335 (Martin Diehl, et al. eds., 2016), *available at https://doi.org/10.4018/978-1-4666-8745-5.ch017* (''Clearing and settlement operations have evolved over time to become remarkably complex. This complexity creates business challenges, especially for management of liquidity, which could potentially have systemic consequences for the wider financial system. This complexity may also increase the barriers to entry that can discourage competition in trade settlement and securities services.'').

[467] Membership requirements vary across the CCAs. For example, the self-clearing minimum net-capital requirement is $500 thousand for NSCC, while OCC's net capital requirement is $2.5 million. Multiple memberships by the same firm are much more common at NSCC than at the other CCAs.

[468] *See* Better Markets at 10 (''Since [the 2008 financial crisis], more and more connections in the global financial system run through CCPs. This growing interconnectedness has benefits but also poses risks.''). *See* SIFMA at 2 (''In this regard, the SEC's Proposal is increasingly relevant in light of the SEC's recent proposal to require increased clearing of the Treasury market, which would occur through a single SEC-regulated Clearing Agency.'').

[469] Data from DTCC's Trade Information Warehouse, compiled by Commission staff. At the time of adoption, 2023 data were not available.

[470] *See supra* note 459.

[471] *See* DTCC, *Annual Report* (2023), *available at https://www.dtcc.com/-/media/Files/Downloads/Annual%20Report/2023/DTCC-2023-AR-Print.pdf.* The total value of transactions settled in 2021 was $432 trillion. The proposing release reported the related statistic of the total value of *securities* transactions settled in 2021, which was $152 trillion.

OCC cleared 11.1 billion options contracts.[472]

Central clearing benefits the markets by significantly reducing participants' counterparty risk and through more efficient netting of margin requirements. Consequently, central clearing also benefits the financial system by increasing financial resilience and the ability to monitor and manage risk.[473] The role of a clearing agency in promoting resilience highlights its central importance in the functioning of markets.[474] If a CCP is unable to perform its risk management functions effectively, it can transmit risk throughout the financial system. Similarly, if a CSD is unable to perform its functions, market participants may be unable to settle their transactions, which may transmit risk throughout the financial system.

Disruption to a clearing agency's operations, or failure on the part of a clearing agency to meet its obligations, could serve as a source of contagion, resulting in significant costs not only to the clearing agency itself and its participants but also to other market participants and the broader U.S. financial system.[475] Absent proper risk management, a clearing agency failure could destabilize the financial system.[476] As a result, proper management of the risks associated with central clearing helps ensure the stability of the U.S. securities markets and the broader U.S. financial system.[477]

2. Overview of the Existing Regulatory Framework

The existing regulatory framework for clearing agencies registered with the Commission includes section 17A of the Exchange Act, the Dodd-Frank Act, and the related rules adopted by the Commission.[478]

Clearing agencies registered with the Commission may also be subject to other domestic or foreign regulation.[479] Specifically, clearing agencies operating in the U.S. may also be subject to regulation by the CFTC (as designated clearing organizations, or DCOs, for futures or swaps that are dually registered with the CFTC and SEC) and the Board of Governors (as SIFMUs or State member banks).[480] Additionally, LCH SA is regulated by l'Autorité des marchés financiers, l'Autorité de Contrôle Prudentiel et de Résolution, and the Banque de France, and it is subject to European Market Infrastructure Regulation (EMIR).[481]

3. Current Recovery and Orderly Wind-Down Plans

Each CCA, as part of a sound risk-management framework, is currently required to establish and maintain plans for the recovery and orderly wind-down of the CCA necessitated by credit losses, liquidity shortfalls, losses from general business risk, or any other losses (such plans are referred to as recovery and wind-down plans, or RWPs).[482] The CCA may have one RWP document, or it may maintain two separate documents, referring to one as the recovery plan and the other as the orderly wind-down plan. Although the Commission did not include specific requirements for RWPs in the CCA Standards Adopting Release, the Commission did offer guidance about what CCAs should consider when

[472] *See* OCC, *Press Release OCC Reports December 2023 and Total 2023 Volume Data* (Jan. 4, 2024), *available at https://www.theocc.com/newsroom/press-releases/2024/1-03-occ-reports-december-2023-and-total-2023-volume-data.*

[473] *See* Darrell Duffie, *Still the World's Safe Haven? Redesigning the U.S. Treasury Market After the COVID–19 Crisis* 15 (Hutchins Center Working Paper, Paper No. 62, 2020), *available at https://www.brookings.edu/wp-content/uploads/2020/05/wp62_duffie_v2.pdf* (''Central clearing increases the transparency of settlement risk to regulators and market participants, and in particular allows the CCP to identify concentrated positions and crowded trades, adjusting margin requirements accordingly. Central clearing also improves market safety by lowering exposure to settlement failures. . . . As depicted, settlement failures rose less in March [2020] for [U.S. Treasury] trades that were centrally cleared by FICC than for all trades involving primary dealers. A possible explanation is that central clearing reduces 'daisy-chain' failures, which occur when firm A fails to deliver a security to firm B, causing firm B to fail to firm C, and so on.'').

[474] *See generally* Albert J. Menkveld & Guillaume Vuillemey, *The Economics of Central Clearing,* 13 Ann. Rev. Fin. Econ. 153 (2021).

[475] *See generally* Dietrich Domanski, Leonardo Gambacorta, & Cristina Picillo, *Central Clearing: Trends and Current Issues,* BIS Q. Rev. (Dec. 2015), *available at https://www.bis.org/publ/qtrpdf/r_qt1512g.pdf* (describing links between CCP financial risk management and systemic risk); Darrell Duffie, Ada Li, & Theo Lubke, *Policy Perspectives on OTC Derivatives Market Infrastructure* 9 (Fed. Res. Bank N.Y. Staff Rep., Paper No. 424, 2010), *available at http://www.newyorkfed.org/research/staff_reports/sr424.pdf* (''If a CCP is successful in clearing a large quantity of derivatives trades, the CCP is itself a systemically important financial institution. The failure of a CCP could suddenly expose many major market participants to losses. Any such failure, moreover, is likely to have been triggered by the failure of one or more large clearing agency participants, and therefore to occur during a period of extreme market fragility.''); Craig Pirrong, *The Inefficiency of Clearing Mandates* 11–14, 16–17, 24–26 (Policy Analysis Working Paper, Paper No. 655, 2010), *available at http://www.cato.org/pubs/pas/PA665.pdf* (stating, among other things, that ''CCPs are concentrated points of potential failure that can create their own systemic risks,'' that ''[a]t most, creation of CCPs changes the topology of the network of connections among firms, but it does not eliminate these connections,'' that clearing may lead speculators and hedgers to take larger positions, that a CCP's failure to effectively price counterparty risks may lead to moral hazard and adverse selection problems, that the main effect of clearing would be to ''redistribute losses consequent to a bankruptcy or run,'' and that clearing entities have failed or come under stress in the past, including in connection with the 1987 market break); *see* Glenn Hubbard et al., *Report of the Task Force on Financial Stability,* Brookings Inst., 96 (June 2021), *available at https://www.brookings.edu/wp-content/uploads/2021/06/financial-stability_report.pdf* (''In short, the systemic consequences from a failure of a major CCP, or worse, multiple CCPs, would be severe. Pervasive reforms of derivatives markets following 2008 are, in effect, unfinished business; the systemic risk of CCPs has been exacerbated and left unaddressed.''); Froukelien Wendt, *Central Counterparties: Addressing their Too Important to Fail Nature* (working paper Jan. 2015), *available at https://ssrn.com/abstract=2568596* (retrieved from SSRN Elsevier database) (assessing the potential channels for contagion arising from CCP interconnectedness); Manmohan Singh, *Making OTC Derivatives Safe—A Fresh Look* 5–11 (IMF Working Paper, Paper No. 11/66, 2011), *available at http://www.imf.org/external/pubs/ft/wp/2011/wp1166.pdf* (addressing factors that could lead central counterparties to be ''risk nodes'' that may threaten systemic disruption).

[476] *See* Better Markets at 10 (''The inability of a CCP to recover from severe losses, or the disorderly wind-down of a CCP, could have significant repercussions not only for the sector in which the CCP operates but for the markets and the economy as a whole.''); SIFMA at 2 (''In this regard, the SEC's Proposal is increasingly relevant in light of the SEC's recent proposal to require increased clearing of the Treasury market, which would occur through a single SEC-regulated Clearing Agency.'').

[477] *See* Paolo Saguato, *Financial Regulation, Corporate Governance, and the Hidden Costs of Clearinghouses,* 82 Ohio St. L.J. 1071, 1074–75 (2021), *available at https://moritzlaw.osu.edu/sites/default/files/2022-03/18.%20Saguato_v82-6_1071-1140.pdf* (''[T]he decision to centralize risk in clearinghouses made them critical for the stability of the financial system, to the point that they are considered not only too-big-to-fail, but also too-important-to-fail institutions.'').

[478] *See* RWP Proposing Release, *supra* note 18 at Part II.

[479] *See supra* Part III.D.2.

[480] *See* 12 U.S.C. 5472, 5469. Currently, ICC, LCH SA, and OCC are regulated by the Commission and the CFTC. The CFTC is the primary supervisory regulator for ICC and LCH SA, while the Commission is the primary supervisory regulator for OCC. DTC, FICC, NSCC, ICC, and OCC have been designated systemically important financial market utilities by the FSOC (*see infra* note 517 and the accompanying text). DTC is also a state member bank of the Federal Reserve System and a New York State registered trust company and is therefore also regulated by the New York Department of Banking and Finance. LCH SA is not regulated by the Board of Governors. The Board of Governors addresses certain recovery and orderly wind-down plans in Regulation HH (*see* RWP Proposing Release, *supra* note 18, at 34710 n.68 and accompanying text), and the CFTC requires certain derivatives clearing organizations to maintain recovery and orderly wind-down plans through Regulation § 39.39(b) and subsequent guidance (*see* RWP Proposing Release, *supra* note 18, at 34716 n.69 and accompanying text).

[481] *See* LCH, *Company Structure, available at https://www.lch.com/about-us/structure-and-governance/company-structure.*

[482] *See* RWP Proposing Release, *supra* note 18, at 34710 n.16 and accompanying text.

creating their RWPs.[483] The RWPs are subject to the rule filing requirement of Rule 19b–4, and all six active CCAs have submitted their plans and subsequent modifications to the Commission for review, public comment, and approval.[484] Additionally, all of the CCAs have submitted confidential treatment requests with their RWPs pursuant to 17 CFR 240.24b–2. The Commission has also reviewed these confidential treatment requests and concluded that the redacted material could be withheld from the public under the Freedom of Information Act.[485] Due to the confidential treatment of the RWPs, the current release includes aggregated, anonymized analyses of the RWPs submitted to the Commission by the clearing agencies. Additionally, Form 19b–4, which is public, requires a description of the proposed rule change for public comment.[486] To the extent that information in the baseline has been drawn from public sources, such as the CCAs' SRO rule filings, we have included attribution accordingly. All six active CCAs have approved RWPs in place, and the plans differ in, for example, length, style, emphasis, and specificity. In the remainder of Part IV.B. 3, we summarize CCAs' current RWPs in terms of nine elements that are part of final Rule 17Ad–26.

a. Core Services

Each RWP currently includes what the CCA has identified and described as its core payment, clearing, and settlement services,[487] as well as the criteria that the CCA employs to make such a determination as to what constitutes core services.[488] Depending on their operations and the structure of their RWPs, CCAs currently identify between one and a dozen or more core services in those RWPs. Currently, no CCA has analyses in its RWP regarding the staffing roles necessary to support the core services that they list or how such staffing roles necessary to support such core services would be available to continue operating the CCA in the event of a recovery and during an orderly wind-down.

b. Service Providers

Each RWP identifies and describes, to varying degrees, certain service providers, including both affiliates and third parties, upon which the associated CCA relies to provide its core payment, clearing, and settlement services. Most plans do not explicitly link the identified service providers to the CCAs' core payment, clearing, and settlement services. Some of the RWPs state that they assume core service providers will continue to perform in the event of a wind-down; at least one RWP states that it analyzes its contractual arrangements with respect to continuing to provide services during a recovery; [489] and at least one RWP states that it is reducing dependencies on third parties.

c. Scenarios

Each RWP generally identifies and describes certain scenarios that may potentially prevent the CCA from being able to provide its core payment, clearing, and settlement services as a going concern.[490] The RWPs differ in the number of scenarios identified and described as well as the extent of the specificity with which each scenario is discussed. For example, some RWPs present short qualitative analyses of member defaults, while others present long, detailed quantitative analyses of member defaults.

d. Criteria That Could Trigger Implementation

Each RWP identifies and describes criteria that could trigger the CCA's implementation of the recovery and orderly wind-down plans.[491] The RWPs differ in the number of identified triggering criteria and in the detail in which they discuss each triggering

[483] CCA Standards Adopting Release, *supra* note 5, at 70810; *see also* RWP Proposing Release, *supra* note 18 at Part II.A (discussing the guidance).

[484] *See* RWP Proposing Release *supra* note 18, at 34711 n.32 (regarding Form 19b–4); *id.* at 34712 n.41 (regarding proposed rule changes).

[485] *See, e.g., https://www.sec.gov/rules/sro/nscc/2018/34-82430-ex5a.pdf* (as an example of the redacted filing materials posted for SR–NSCC–2017–017); *see also id.* A commenter stated that CCA members will manage key risks better if they have transparency into the RWPs of their CCAs. *See* ICI Letter at 8 (''It is critical for clearing members and end-user customers, such as funds, to have greater transparency into the content of RWPs. Such transparency could allow participants to determine the extent of their potential liabilities and predictably manage exposures to a clearing entity.'').

[486] *See* RWP Proposing Release, *supra* note 18, at 34711 n.32.

[487] In a change from Proposed Rule 17Ad–26(a)(1), instead of referring to ''critical payment, clearing and settlement services,'' the final rule refers to ''core payment, clearing, and settlement services.'' Use of the descriptive term ''core'' rather than ''critical'' does not affect the Commission's prior guidance on identifying those services. *See supra* Part II.C.1.

[488] *See, e.g.,* Exchange Act Release Nos. 82462 (Jan. 2, 2018), 83 FR 884, 885 (Jan. 8, 2018) (SR–DTC–2017–021) (stating that the RWP provided a description of its services and the criteria to determine which services are considered critical) (''DTC 2017 Notice''); 82431 (Jan. 2, 2018), 83 FR 871, 872 (Jan. 8, 2018) (SR–FICC–2017–021) (stating that the RWP provided a description of its services and the criteria to determine which services are considered critical) (''FICC 2017 Notice''); 34–91806 (May 10, 2021), 86 FR 26561 (May 14, 2021) (SR–ICC–2021–005) (''ICC 2021 Order'') (stating that the ICC recovery plan explains that ICC's sole critical operation is provides credit default swap clearing services); 82316 (Dec. 13, 2017), 82 FR 60246, 60247 (Dec. 19, 2017) (SR–LCH SA–2017–012) (stating that LCH SA performed an assessment on identification of critical functions and shared services in accordance with Financial Stability Board guidance) (''LCH 2017 Notice''); 82430 (Jan. 2, 2018), 83 FR 841, 842 (Jan. 8, 2018) (SR–NSCC–2017–017) (stating that the RWP provided a description of its services and the criteria to determine which services are considered critical) (''NSCC 2017 Notice''); 82352 (Dec. 19, 2017), 82 FR 61072, 61074–75 (Dec. 26, 2017) (SR–OCC–2017–021) (stating that OCC's RWP identifies critical services and critical support functions) (''OCC 2017 Notice'').

[489] For example, OCC's plan discusses the critical vendors for each of the identified critical services, the critical support functions, and the critical external interconnections that OCC maintains with other FMUs, exchanges (including designated contract markets), clearing and settlement banks, custodian banks, letter of credit banks, clearing members and credit facility lenders, and the appendices to the plan identifies key vendors and service providers, as well as key agreements to be maintained. OCC 2017 Notice, *supra* note 488, at 61075. ICC's plan categorizes its critical services by those that are provided to ICC by its parent company versus those that are provided by external third parties, and it also details the IT systems and applications critical to ICC's clearing operations, including those provided by ICE, those provided by external third parties, and those that ICC itself provides. Further, the plan analyzes ICC's contractual arrangements in the context of continuing services under those contracts during recovery. 34–79750 (Jan. 6, 2017), 82 FR 3831 (Jan. 12, 2017) (SR–ICC–2016–013). In addition, NSCC's, FICC's, and DTC's plans identify external service providers for which the relationships are managed by a particular office within DTCC. *See, e.g.,* Securities Exchange Act Release Nos. 91428 (Mar. 29, 2021), 86 FR 17440, 17442 (Mar. 29, 2021) (SR–NSCC–2021–004) (''NSCC 2021 Notice''); 91430 (Mar. 29, 2021), 86 FR 17432, 17433–34 (Apr. 2, 2021) (SR–FICC–2021–002) (''FICC 2021 Notice''); 91429 (Mar. 29, 2021), 86 FR 17421, 17422 (Mar. 29, 2021) (SR–DTC–2021–004) (''DTC 2021 Notice'').

[490] For example, OCC's plan identifies and considers scenarios that may potentially prevent it from being able to provide its critical services as a going concern. *See* OCC 2017 Notice, *supra* note 488, at 61073. ICC's plan describes potential stress scenarios that may prevent it from being able to meet obligations and provide services and the recovery tools available to it to address these stress scenarios. *See* Securities Exchange Act Release No. 91439 (Mar. 30, 2021), 86 FR 17649, 17650 (Apr. 5, 2021) (SR–ICC–2021–005) (''ICC 2021 Notice''). LCH SA's plans categorizes potential stress scenarios in two ways as a result of either: (i) Clearing member defaults and (ii) non-clearing member events. *See* LCH 2017 Notice, *supra* note 488, at 60248. In addition, each of the plans for NSCC, FICC, and DTC discuss, at a general level, scenarios in terms of uncovered losses or liquidity shortfalls that could result from the default of one or more of its members as well as losses that could arise from non-default events. *See, e.g.,* NSCC 2021 Notice, *supra* note 489, at 17441; FICC 2021 Notice, *supra* note 489, at 17433; DTC 2021 Notice, *supra* note 489, at 17421.

[491] *See* OCC 2017 Notice, *supra* note 488, at 61079–80 (discussing OCC's identification of qualitative trigger events for both recovery and wind-down); 83 FR 34183, 34221, and 44970 (stating the DTC, NSCC, and FICC have identified wind-down triggers and that a CCA would have entered ''recovery phase'' when it issues its first loss allocation round); ICC 2021 Order, *supra* note 488, at 26562.

criterion. There are also differences in the descriptions of the processes that CCAs use to monitor and determine whether the triggering criteria have been met, thus causing their RWPs to be implemented.

e. Rules, Policies, Procedures, and Other Tools or Resources

Each RWP describes, to varying degrees, the rules, policies, procedures, and other tools or resources the CCA could rely upon in a recovery or orderly wind-down to address the scenarios identified in the RWP.[492]

f. Procedures To Ensure Timely Implementation

Each RWP mentions, to varying degrees, mechanisms that would ensure timely implementation of the RWP.[493] Some of the RWPs include specific procedures to ensure timely implementation of the recovery and orderly wind-down plan after specific criteria have been triggered. One of the RWPs has taken steps to ensure timely completion of its recovery and orderly wind-down plan.

g. Informing the Commission

Each RWP generally refers to informing the Commission about recovery or orderly wind-down activities. Some of the RWPs state that they will inform the Commission *after* a recovery or wind-down has been initiated.

h. Testing

Three RWPs provide for annual plan testing but with varying degrees of specificity about the participants' involvement as well as the frequency of such testing. One such RWP specifically refers to sharing the results of the testing with its board of directors, and another states that the RWP would be updated as appropriate as a result of the testing.[494] The remaining CCAs do not mention testing in their RWPs.

i. Board Review and Approval

Each RWP provides for periodic plan reviews, typically annually or biennially.[495] Two RWPs provide for non-scheduled reviews. In the existing plans, the boards of directors of the CCA are responsible for the review and approval of the RWPs, but the plans vary in whether they specify that such review will also occur after material changes to the CCA's operations or in response to the results of periodic testing of the RWPs.

4. Current Risk-Based Margin

As discussed in Part II.A *supra* and Part II.B *supra,* Rule 17Ad–22(e)(6) requires CCAs that provide central counterparty services to establish written policies and procedures reasonably designed to cover their credit exposure to their participants by establishing risk-based margin systems with certain characteristics. Intraday margining is an important tool used by CCAs to manage risk exposures on a real-time basis because it permits the CCAs to make quick changes in required collateral from their participants to cover actual and potential losses in response to volatility spikes.

a. Monitoring Exposure and Intraday Margin Calls

Each CCA currently has some ability to monitor for intraday exposure and to make certain intraday margin calls. The frequency of intraday monitoring and margin calls varies across markets, and it is responsive to the risk characteristics of the underlying markets and participants. Participants are generally required to post margin within an hour of notification or at specified times pursuant to the CCA's rules and procedures. The current practice of CCAs is to release excess margin to participants only once a day at a pre-scheduled time. CCAs have existing policies and procedures around the collection of intraday margin,[496] and some CCAs document when they determine not to make an intraday call pursuant to their written policies and procedures required under Rule 17Ad–22(e)(6)(ii).

For example, OCC revalues its participants' portfolios throughout the day to calculate updated account net asset value, and its rules provide it the authority to issue intraday margin calls.[497] Its intraday calls are generally issued between 11 a.m. and 1:30 p.m. when unrealized losses of an account, based on its start-of-day positions, exceed 50 percent of the account's total margin. NSCC's rules provide the authority to impose intraday mark-to-market charges, and NSCC tracks intraday market price and position changes in 15-minute intervals. NSCC generally collects additional margin if the difference between the most recent mark-to-market price of a participant's net positions and the most recent observed market price exceeds a predetermined threshold, which is currently 80 percent of the participant's volatility charge and may be reduced if NSCC determines that a reduction of the threshold is appropriate to mitigate risk during volatile market conditions.[498]

FICC's GSD and FICC's MBSD have the authority to make intraday margin calls.[499] FICC monitors changes in

[492] *See, e.g.,* 83 FR 34220–21 (identifying NSCC's recovery tool characteristics); FICC 2017 Notice, *supra* note 488, at 878 (identifying FICC's recovery tool characteristics); 83 FR 44970 (identifying DTC's recovery tool characteristics); OCC 2017 Notice, *supra* note 488, at 61075–80 (identifying OCC's enhanced risk management and recovery tools); ICC 2021 Order, *supra* note 488, at 26562 (identifying ICC's recovery tools); 83 FR 28886–87 (describing LCH SA's tools).

[493] Each of the plans for NSCC, FICC, and DTC provides a description of the governance and process around management of a stress event along a ''Crisis Continuum'' timeline. *See, e.g.,* NSCC 2017 Notice, *supra* note 488, at 842; FICC 2017 Notice, *supra* note 488, at 872; DTC 2017 Notice, *supra* note 488, at 886. OCC's recovery plan outlines an escalation process for the occurrence of a ''Recovery Trigger Event'' as well as provides general descriptions of how it would anticipate deploying its recovery tools in response to the six stress scenarios it identified. OCC 2017 Notice, *supra* note 488, at 61079–80. The ICC recovery plan describes the governance arrangements that provide oversight and direction of the plan. *See* ICC 2021 Notice, *supra* note 490, at 17649. The LCH SA recovery plan identifies the groups and individuals within LCH SA that are responsible for the various aspects of plan. *See* LCH 2017 Notice, *supra* note 488, at 60250.

[494] *See* ICC 2021 Order, *supra* note 488, at 26562 (referencing testing its Recovery Plan at least annually, as part of its annual default management drills and providing the results of such testing, as well as any changes it recommends due to such testing, to the ICC Board and Risk Committee); ICCEU, 83 FR 2857 (referencing testing elements of the Recovery Plan as part of normal operations and risk management procedures); LCH 2017 Notice, *supra* note 488, at 60250 (referencing fire drills intended to simulate all aspects of a member default, including the auctioning of the defaulting members portfolio to non-defaulting members (where appropriate) and involving the participation of members and relevant functions within the LCH SA organization, with revisions to the recovery plan as appropriate in light of the testing).

[495] NSCC, FICC, and DTC review their respective RWPs biennially. *See* NSCC 2021 Notice, *supra* note 489, at 17441; FICC 2021 Notice, *supra* note 489, at 17433; DTC 2021 Notice, *supra* note 489, at 17421. OCC conducts an annual review of its RWP. *See* Securities Exchange Act Release No. 90315 (Nov. 3, 2020), 85 FR 71384, 71385 (Nov. 9, 2020) (SR–OCC–2020–013); *see also* OCC 2017 Notice, *supra* note 488, at 61080. ICC's RWP describes governance arrangements that provide for oversight and direction in respect to review and testing of the plans. *See* ICC 2021 Notice, *supra* note 490, at 17651–52. LCH SA decided to review its wind-down plan on an annual basis or more frequently, if required. *See* Securities Exchange Act Release No. 88297 (Feb. 27, 2020), 85 FR 12814 (Mar. 4, 2020) (SR–LCH SA–2020–001).

[496] Rule 17Ad–22(e)(6)(ii).

[497] *See* OCC, Disclosure Framework *supra* note 96 at 50; OCC Rule 609 (regarding intra-day margin calls).

[498] *See* NSCC Disclosure Framework *supra* note 96 at 58; NSCC Rules, Procedure XV (defining intraday mark-to-market charge). *See* DTCC at 3.

[499] *See* FICC's GSD Rule 4, section 2a (regarding the intraday supplemental fund deposit); FICC's MBSD Rule 1 (defining intraday VaR and intraday mark-to-market charges) and Rule 4, section 2(b) (regarding the daily margin requirement) and section 3a (regarding the intraday requirements). In addition, FICC's GSD collects margin twice a day under its current rules, notwithstanding any additional intraday margin calls. *See* FICC's GSD Rules, schedule of timeframes.

pricing and positions frequently throughout the day, and it may collect intraday margin to cover the price movement from those participants with a significant exposure in an identified security or net portfolio and the market value of those positions.[500]

ICC also monitors each participant's intraday profit and loss to determine if its intraday exposure is covered by the margin on deposit, and it may issue margin calls to participants that are not sufficiently collateralized.[501] LCH SA also has the ability and authority to make intraday margin calls that are based on intraday positions and valuations.[502]

b. Reliable Sources of Timely Price Data and Other Substantive Inputs

CCAs use price data as well as other data sources and other substantive inputs in their risk-based margin systems, which is expected given the substantive differences in the markets and participants they serve. Based on its supervisory experience, the Commission understands that all CCAs generally have policies and procedures in place to use a risk-based margin system that uses reliable sources of timely price data and includes procedures and sound valuation models for addressing circumstances in which price data are not readily available or reliable. The Commission also understands that if a CCA uses other substantive inputs, such as portfolio size, asset price volatility, duration, convexity, and outputs from external model vendors, which are not required by the Commission's rules, not all CCAs have policies and procedures for addressing circumstances in which those substantive inputs are not readily available or reliable so that the CCA can continue to meet its requirements under Rule 17Ad–22(e)(6).The policies and procedures used when price data or other substantive inputs are not available vary from one RWP to another. For example, the largest component of margin at FICC's GSD is typically its ''VaR Charge.'' The VaR Charge is based on the potential price volatility of unsettled positions using a sensitivity-based Value-at-Risk (''VaR'') methodology over a ten-year historical look-back period. In addition, FICC's GSD also uses an alternative ''Margin Proxy'' calculation as a backup VaR Charge calculation to the sensitivity approach in the event that FICC experiences a data disruption with the third-party vendor upon which FICC relies to produce the sensitivity-based VaR Charge.[503] In a similar fashion, FICC's MBSD uses both a VaR Charge and, as a backup in the event of a data disruption from its third-party vendor, a Margin Proxy [504] NSCC relies upon a parametric VaR model to determine the potential future exposure of a given portfolio based on historical price movements, using 153 days as the minimum sample period for the historical data. For certain securities, including fixed income securities, UITs, illiquid securities, securities that are amendable to statistical analysis only in a complex manner, and securities that are less amenable to statistical analysis, a haircut-based volatility charge is applied in lieu of the VaR Charge.[505]

C. Consideration of Benefits and Costs as Well as the Effects on Efficiency, Competition, and Capital Formation

The following discussion sets forth the potential economic effects stemming from the final rule and amendments, including the anticipated effects on efficiency, competition, and capital formation. The benefits and costs discussed in this section are relative to the economic baseline discussed previously, which includes the CCAs' current RWPs and their current risk-based margin practices. A commenter agrees that there is a large benefit flowing from requiring the CCAs to better define their risk management procedures.[506]

The level of change a CCA makes to its RWP and risk management practices to bring itself into alignment with the final rule and amendments will impact the size of the benefits and costs, both direct and indirect, for the CCAs, their members, and the broader market. As stated in the baseline, each CCAs' plans differ in, for example, length, style, emphasis, and specificity, and each CCA has a current risk-based margin system that it has designed to manage certain idiosyncratic risks that it faces. Additionally, the final rules and amendments are designed to provide a CCA with discretion and flexibility, which means that the CCAs will be able to tailor their RWPs and risk-based margin systems to their particular situations.

To the extent that a CCA determines that it does not have to make changes to its RWP or risk-based margin system in response to a particular part of the final rule and amendments, the CCA, its participants, and the broader market will have already absorbed the benefits and costs of those parts of the final rule and amendments and, therefore, they may not experience any direct benefits or costs from those parts of the final rule and amendments.[507]

Sufficiently large disruptions in the operations at any of the CCAs would cause significant negative externalities in the markets they serve, which would likely spill over into other markets. These ripple effects would negatively affect numerous market participants, including investors. Because CCAs may not internalize the full cost of these externalities due in part to the structure of the clearing markets, their investments in their RWPs and risk-based margin systems might be suboptimal from a public welfare perspective.[508] An important benefit of the final rule and amendments is that they require CCAs to maintain a higher investment in risk management than they might otherwise choose if they

[500] *See generally supra* note 499; FICC Disclosure Framework at 65, *available at https://www.dtcc.com/-/media/Files/Downloads/legal/policy-and-compliance/FICC_Disclosure_Framework.pdf.*

[501] ICC Disclosure Framework at 22–23, *available at https://www.theice.com/publicdocs/clear_credit/ICEClearCredit_DisclosureFramework.pdf;* ICC Rule 401.

[502] *See generally* LCH SA Disclosure Framework at 31, *available at https://www.lch.com/system/files/media_root/LCH%20SA%20-%20Comprehensive%20Disclosure%20as%20required%20by%20SEC%20Rule%2017Ad-22%28e%29%2823%29_2022%20Q32022.pdf,* and LCH CDS Clearing Procedures section 2.21 (describing ''extraordinary margin'' that LCH SA may require to cover the risk of price/spread fluctuations occurring on an intraday basis).

[503] *See generally* FICC Disclosure Framework at 62; Release No. 34–82779 (Feb. 26, 2018), 83 FR 9055 (Mar. 2, 2018) (File No. SR–FICC–2018–801) (describing both the sensitivity-based VaR model that would use a third party vendor to supply security-level risk sensitivity data and relevant historical risk factor time series data and the use of the ''Margin Proxy'' in the event of a disruption at FICC's third-party vendor, as well as the procedures that would govern in the event that the vendor fails to deliver such data).

[504] *See, e.g.,* FICC Disclosure Framework at 64; Release No. 34–079643 (Dec. 21, 2016), 81 FR 95669 (Dec. 28, 2016) (File No. SR–FICC–2016–801) (describing both the sensitivity-based VaR model that would use a third party vendor to supply security-level risk sensitivity data and relevant historical risk factor time series data and the use of the ''Margin Proxy'' in the event of a disruption at FICC's third-party vendor, as well as the procedures that would govern in the event that the vendor fails to deliver such data); Release No. 34–92145 (June 10, 2021), 86 FR 32079 (June 16, 2021) (File No. SR–FICC–2020–804) (describing the calculation of the Minimum Margin Amount).

[505] *See* NSCC Disclosure Framework, *supra* note 498, at 58–61.

[506] *See* SIFMA at 3 (''Our members are in agreement with the Commissions' determination that there is a very significant benefit to requiring the Clearing Agencies to better define their risk management procedures'').

[507] They may experience indirect benefits to the extent other CCAs make risk-reducing changes that reduce the risk of negative spillovers.

[508] *See* SIFMA at 14 and 22 (''With the combination of clearing mandates and single product provider status, there is very limited business pressure on Clearing Agencies to invest in the optimum level of risk management. Rather, the impetus must come from regulatory oversight.'').

have not already adopted the requirements of the rule and amendments.

The Commission has sought to strike a balance between requirements that enhance risk management practices and recovery and winddown procedures and maintaining some flexibility in the design and implementation of these requirements. For example, while CCAs will be required to test their ability to implement the RWPs at least every 12 months, each CCA may structure the planning, execution, and analysis of each test in a way that reduces its aggregate testing costs for itself, its participants, and its other stakeholders, so long as the testing exercise addresses the distinct elements of the separate testing requirements.

The costs discussed in Part IV.C will be borne by CCAs and their participants. For CCAs owned by participants, all the costs will ultimately be passed on to participants because they are residual beneficiaries of the CCA. For CCAs not owned by participants, the level of pass-through will depend upon several factors, including the level of competition among clearing agencies and the existence of mandates that force market participants to clear. In both cases, the participants will likely pass through some of these costs to their customers, the level of which will depend on factors such as the customers' sensitivities to costs and the amount of competition between participants for customers. Generally, if a CCA does not face significant competition, it will have an incentive to absorb part of the cost increase. In the extreme case of a perfectly competitive market, on the other hand, an increase in costs will be fully passed through to the customer because there are no economic profits and price equals marginal costs.[509]

To the extent that a CCA's current practices are misaligned with the final rule and amendments, the CCA, as discussed in the remainder of this subsection, will need to modify its RWP or risk-based margin system to comply with the new standards. The resulting benefits and costs will increase with the number of modifications. Because the Commission has previously stated that RWPs are rules for purposes of a CCA's SRO obligations, and because the CCAs already have filed such RWPs with the Commission for approval, any such modifications will be subject to Commission review and public comment pursuant to Rule 19b–4.[510] Similarly, the Commission considers changes to a CCA's risk-based margin system as part of the SRO rule filing process, making any such modifications also subject to Commission review and public comment pursuant to Rule 19b–4.[511] The final rule and amendments could also cause a clearing agency to make different business decisions, such as capital expenditure decisions, that may not be subject to the same Commission review process.

One commenter stated that participants and end-user customers need ''greater transparency into the content of RWPs'' for several reasons, including allowing participants to better manage their exposure to the CCA and positively affecting the CCA's risk management functions.[512] The new rule and the final amendments will increase transparency because they impose a public minimum standard that all CCAs must follow and also because, as described in the baseline, CCAs are subject to a public notice and comment process before making certain changes, including changes to their rule books.[513]

1. Final Rule 17Ad–26

Final Rule 17Ad–26 sets forth nine elements that must be included in a CCA's RWP. The remainder of this subsection discusses each of these elements in turn, explaining how some will make RWPs more effective in guiding the CCAs during times of recovery or wind-down while others will help participants and regulators better understand how the CCAs will prepare for and respond to stress. The final rule will reduce systemic risk to the extent that it reduces the risk of unsuccessful recoveries, disorderly wind-downs, and negative spillovers to other clearing agencies and to other markets.[514] These benefits likely will increase with the amount of change each CCA makes to align itself with the final rule because, as stated in the baseline analysis, some RWPs are more aligned with the nine elements that are part of final Rule 17Ad–26 than are other RWPs. Final Rule 17Ad–26 will require CCAs to modify their RWPs to the extent their RWPs do not already align with the final rule. One commenter stated that the benefits are purely hypothetical because they would only accrue in the event of the implementation of a recovery plan.[515] The Commission disagrees with this assessment and anticipates that these changes may result in the CCAs being more aware of potential risks and the associated costs of certain factors under their control, which could, in turn, lead to the CCA making risk-reducing changes to certain business practices. A few commenters stated that CCAs' current risk-management efforts may be suboptimal from a public welfare perspective.[516] The final new rule includes a set of risk-focused requirements that RWPs must meet in the future, which will ensure that CCAs maintain a higher investment in risk management than they might otherwise choose.

[509] More specifically, the market clearing quantity of the good or service supplied will adjust and the extent of industry-wide cost pass-through in a perfectly competitive market depends on the elasticity of demand relative to supply. The more elastic is demand, and the less elastic is supply, the smaller the extent of pass-through, all else being equal. *See* RBB Economics, *Cost Pass-Through: Theory, Measurement and Potential Policy Implications,* 4 (Feb. 2014), *available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/320912/Cost_Pass-Through_Report.pdf.*

[510] *Supra* note 484. *See infra* section IV.C.1.j for cost estimates of written policies and procedures associated with final Rule 17Ad–26 and the rule 19b–4 approval process.

[511] *See infra* section IV.C.2.c for cost estimates of written policies and procedures associated with final Rule 17Ad–22(e)(6) and the Rule 19b–4 approval process.

[512] *See* ICI at 8 (''It is critical for clearing members and end-user customers, such as funds, to have greater transparency into the content of RWPs. Such transparency could allow participants to determine the extent of their potential liabilities and predictably manage exposures to a clearing entity. Importantly, increased transparency could facilitate input from participants that may serve to enhance a clearing entity's risk management functions. While requiring clearing entities to maintain and submit RWPs for regulatory purposes provides the agencies with needed visibility and can increase confidence in cleared markets, such requirements alone fail to provide these important benefits to market participants.''). *Id.* at 9 (''At a minimum, clearing members and customers should be aware of (1) the criteria that may trigger implementation, (2) the tools and strategies that a clearing entity plans to use, and (3) the source of capital or funds to be applied in a recovery or wind-down scenario. Providing access to these material portions of RWPs would help market participants have a more complete understanding of the risks presented by clearing with a particular clearing entity and allow them to better manage their exposures'').

[513] *See supra* note 484. Additionally, Rule 19b–4 would also apply to certain statements that a CCA issues concerning its margin methodology. *See supra* note 83.

[514] *See supra* note 475 and accompanying text. *See* Better Markets at 9 (''Requiring that the recovery and wind-down plans of covered clearing agencies include certain specific elements is likely to reduce the risk of unsuccessful recoveries, disorderly wind downs, and negative spillovers to other clearing agencies and other markets.'').

[515] Davidson at 2.

[516] *See supra* note 508 and accompanying text; *see also* Muth at 2 (''A complex cocktail of incentives familiar to the Commission but too labyrinthine to elucidate here causes management to (1) underestimate the risk of entity failure, (2) underestimate the range of scenarios that might threaten entity survival, and (3) underestimate the amount of information that needs to be communicated effectively to 'relevant authorities' to illuminate threats to the entity's solvency, especially when those threats are high-magnitude, low-frequency risks.'').

The Commission did not receive any comments on the costs each CCA will incur to bring its RWP into alignment with proposed Rule 17Ad–26(a)(4), (5), and (6).

a. Core Clearing and Settlement Services

Final Rule 17Ad–26(a)(1) requires RWPs to identify and describe their core payment, clearing, and settlement services and to address how the CCA would continue to provide such core services in the event of a recovery and during an orderly wind-down, including the (a) identification of the staffing roles necessary to support such core services, and (b) analysis of how such staffing roles necessary to support such core services would continue in the event of a recovery and during an orderly wind-down.

CCAs play an important role as financial market utilities. By virtue of the unique services that they offer, the network effects under which they operate, and their specialization by asset class, any failure of the CCAs to provide their core services might affect the stability of U.S. financial markets.[517] Accordingly, policies and procedures that increase the resiliency of CCAs are expected to improve the stability of these markets.

Each of the CCAs' RWPs currently identifies its core services, as stated in the baseline analysis, but they differ in the degree to which they address continuation in the event of a recovery and during an orderly wind-down.

Markets in which the dominant CCAs are currently less comprehensive in addressing continuation in their RWPs likely will benefit from this requirement because these CCAs will be required to work through and memorialize in their RWPs how the CCA will continue to provide its core services in the event of a recovery and during an orderly wind-down.

As mentioned in the economic baseline section, none of the CCAs currently identifies the staffing roles necessary to support core services or provides in their RWPs analyses of how such staffing roles necessary to support such core services would continue in the event of a recovery and during an orderly wind-down. Because CCAs do not currently identify the staffing roles that are necessary to support core services and how such staffing roles would continue during times of crisis, this new requirement likely will provide benefits to the market. Forward-looking analyses around issues related to potential staffing shortfalls should provide each CCA with additional certainty and clarity around who would deploy the RWP and supervise its implementation. The RWP might contemplate tools that help with the retention of certain personnel, the development of other internal personnel who could stand in for those personnel, the recruitment of replacement personnel, possibly from its own participants or from other domestic or international CCAs. In all cases, the tools should be robust regardless of the financial situation of the CCA. A CCA that retains its personnel and its ability to service external relationships in the event of a recovery or orderly wind-down may be able to reduce not only potential losses for its participants but also further market disruptions by ensuring its critical clearance and settlement services continue.[518]

The current lack of staffing role analyses in RWPs means that CCAs will incur costs, related to drafting the analyses and implementing the resulting conclusions from the analyses. For example, were the CCA to undertake a recovery or wind-down that significantly affects its operations or structure, a CCA may determine that certain personnel would be likely to leave the CCA. The CCA may determine that it is appropriate to strengthen its employee agreements so that those employees have more incentives to remain at the CCA during a recovery or wind-down even if this includes a sale or transfer of one or more of its core services to another entity or a receiver. Alternatively, or additionally, a CCA may choose to invest in internal development programs and processes so other employees acquire skills that are necessary during recovery and wind-down events, making the loss of any employee less costly via internal redundancy. Commenters stated that attracting and retaining skilled employees is costly; one commenter stated that some employees might chose to leave in certain circumstances despite having very lucrative employment contracts; another commenter stated CCAs with sufficient resources will be able to retain their key personnel.[519] The Commission recognizes that it may be costly to ensure that employees in essential staffing roles are available to support core services in the event of a recovery and during an orderly wind-down. The final rules do not require retention of any employee, but they do require the identification of staffing roles and an analysis of how those roles would continue. The final rules allow CCAs to use a variety of human resource management tools, which will better enable CCAs to find cost-effective tools that enable them to maintain their core services in the event of a recovery and during an orderly wind-down.

b. Service Providers

Final Rule 17Ad–26(a)(2) requires RWPs (i) to identify and describe any service providers for core services, specifying which core services each service provider support, and (ii) to address how the CCA would ensure that service providers for core services would continue to perform in the event of a recovery and during an orderly wind-down, including consideration of its written agreements with such service providers and whether the obligations under those written agreements are subject to alteration or termination as a result of initiation of the recovery and orderly wind-down plan.

One commenter stated that it is critical that CCAs have service contracts that cannot be terminated in the aftermath of an insolvency event,[520] whereas other commenters stated that CCAs cannot ''ensure'' that service providers would continue to perform in the event of a recovery and during an

[517] Five of the six CCAs have been designated by the FSOC as SIFMUs because the failure or disruption to the functioning of the financial market utility could create or increase the risk of significant liquidity or credit problems spreading among financial institutions or markets. *See Designations,* U.S. Dep't Treasury, *https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc/designations; see also supra* note 88.

[518] *See* SIFMA at 14 (''In fact, one of the lessons that can be drawn from the Lehman Brothers failure that precipitated the 2008 financial crisis is that the largest losses may not be the ones that lead up to the insolvency event, but rather those that follow the insolvency event. In the case of Lehman Brothers, its inability following the insolvency event to keep its personnel from leaving and the difficulty it had in continuing servicing relationships were in large part the cause of the financial losses to its customers and market disruptions.'').

[519] *See* Donaldson at 5 (''Likewise, the required skills, the demands on retention, and the time to identify, attract and train new staff to the necessary level of expertise in virtually all the relevant departments is very substantial.''). *See* SIFMA at 14 (''It is important that a Clearing Agency have service contracts that cannot be terminated in the aftermath of an insolvency event and that it has sufficient going concern resources that will allow it to retain its key personnel.''). *See* Donaldson at 6 (''The recent experience at a large household name social media company should make clear that even the most lucrative employment agreements are rarely sufficient to get highly in demand skilled employees to stay on board a 'sinking ship.' Furthermore, certain CCAs have organized labor agreements in place with many of their employees which would likely require time consuming renegotiation in order to satisfy this provision.'').

[520] *See* SIFMA at 14 (''It is important that a Clearing Agency have service contracts that cannot be terminated in the aftermath of an insolvency event and that it has sufficient going concern resources that will allow it to retain its key personnel.'').

orderly wind-down.[521] The Commission acknowledges that a CCA cannot ensure that a service provider for core services will continue to perform throughout a recovery and an orderly wind-down; nevertheless, if its analysis indicates that the service provider might not continue to perform in those events, it could address how it would handle any termination or non-performance by the service provider, which could satisfy the new requirements.[522]

Some commenters stated that the proposed definition of ''service provider'' was too broad and would unnecessarily increase CCA costs by capturing too many non-essential service providers.[523] The Commission generally agrees with the comments on this point and therefore made corresponding changes to the proposed rule text. The reduced scope of service providers captured by the revised rule is appropriate for recovery and orderly wind-down planning purposes and helps ensure that the CCA focuses its RWPs on the key risks and its responses to those risks.[524]

One commenter stated that due to differences across CCAs, markets, and members, CCAs must be afforded flexibility to interpret and implement the final Rule 17Ad–26(a)(2).[525] The Commission acknowledges that there are important differences across CCAs in terms of products cleared and markets served. The principles-based Rule 17Ad–26(a)(2) allows CCAs to take approaches in their RWPs that differ from those taken by other CCAs in their RWPs.

As stated in the baseline analysis, the RWPs differ in their degree of alignment with the final rule and the level of descriptiveness of service providers. The markets that likely will benefit the most from this new requirement are the ones in which the dominant CCAs' RWPs are currently the least comprehensive in identifying and describing the required service providers and identifying how those service providers will perform in the event of a recovery and during an orderly wind-down because those CCAs would have to negotiate with service providers to ensure their continued performance or find other alternatives. CCAs that make more changes in identifying the service providers and the core payment, clearing, and settlement services provided by each service provider likely will bring more benefits to the markets they serve by putting themselves in a better position to manage their service providers in the event of a recovery or during an orderly wind-down. One commenter stated that in the event that one of the service providers fails, it may not be possible to switch to another service provider because the remaining service providers might not be able to quickly scale up their operations.[526] The Commission recognizes that switching vendors may be difficult in certain circumstances such as during times of crisis and when other CCAs are switching in or out of the same service providers en masse. A key benefit of final Rule 17Ad–26(a)(2) is that CCAs will consider these sorts of costs and incorporate appropriate prophylactic responses to them into their RWPs. This will make the CCAs more resilient, by having more robust RWPs, which will, in turn, reduce the risk and/or size of systemic events.

Each CCA will incur costs to bring its RWP into alignment with the new rule, and these costs are estimated in Part IV.C.1.j, *infra.* These alignment costs will depend on the extent of the enhancements the CCA makes to its RWP, including any contractual changes with its service providers. The underlying costs of the contractual changes may be affected by the relative market power of the CCA versus the service provider in light of the regulatory requirement to meet these new standards. For example, the amendments require the consideration of the CCA's written agreements with its service providers and whether the obligations under those written agreements are subject to alteration or termination as a result of initiation of the recovery and orderly wind-down plan. Consequently, a service provider that has market power or offers a service for which there are high switching costs could potentially earn economic profits by increasing its fees to sign a written agreement with a CCA that ensures the continuation of a core service in the event of a recovery and orderly wind-down.

c. Scenarios

Final Rule 17Ad–26(a)(3) requires RWPs to identify and describe scenarios that may potentially prevent the CCA from being able to provide its core services identified in Rule 17Ad–26(a)(1) as a going concern, including (a) uncovered credit losses, (b) uncovered liquidity shortfalls, and (c) general business losses. As stated in the baseline analysis, each of the CCAs' RWPs currently identifies and describes, to varying degrees, certain relevant scenarios.

The more significant benefits of being required to identify these scenarios will accrue to those markets in which the dominant CCAs lack breadth and specificity in identifying and describing their scenarios. By better understanding the circumstances that could threaten their ability to provide their core services, these CCAs can take steps to reduce the likelihood of these scenarios and, should they materialize, be better prepared to achieve a recovery or orderly wind-down.[527]

Each CCA will incur costs to bring its RWP into alignment with the new rule. The alignment costs will depend on the extent of the enhancements the CCA makes to its RWP. The costs to modify plans that require changes, including those that need to be expanded to

[521] *See* CCP12 at 4 (''CCAs cannot 'ensure' that such service providers would continue to perform in the event of a recovery and during an orderly winddown.''). *See* DTCC at 8 (''This proposed requirement overestimates the negotiating leverage that CCAs have when entering contracts with service providers or assumes that CCAs would be able to unilaterally require service providers to continue performance during a recovery or orderly winddown.''). *See* ICE at 4 (''ICE does not believe it is possible for a [clearing agency] to 'ensure' that a service provider would perform.'').

[522] *See supra* Part II.C.2.

[523] *See* DTCC at 6 (''[The proposed rule] would capture large numbers of service providers to DTCC that are not immediately necessary to the ongoing operations of the critical services of DTCC's CCAs. We believe that this would result in a significant burden upon our CCAs (and likely other CCAs) with minimal benefit to the development of effective RWP.''). *See* ICE at 4 (''ICE believes that the proposed definition of 'critical services' would include third parties that are [not] 'in any way related to the provision of a critical service' and believes this definition is overly broad. In particular, the definition would cover service providers that are only tangentially related to clearing services and have no practical impact on recovery or wind-down planning which would be burdensome for CAs and provide minimal, if any, benefit.'').

[524] *See supra* Parts II.C.2.a and II.D.2.

[525] *See* DTCC at 2 (''DTCC continues to stress, as it has in prior comment letters to the Commission, that CCAs must be afforded the discretion and flexibility to interpret and implement rules based on the risk profiles, markets, and products that respective CCAs serve. Aspects from the Proposal that would benefit from this discretion include . . . the proposed requirement to include contractual terms and conditions that would prevent automatic termination by service providers in the event of a recovery or orderly wind-down.'').

[526] *See* Davidson at 7 (''[a]t present, while it is possible to operate separate genre of application software on different 'Cloud' providers, it is extremely challenging, requiring significant time for deployment and rigorous testing, to move a set of tightly woven operational software applications from one 'Cloud' provider to another. While the existence of several major competitors in the 'Cloud' computing space would appear to support the ability to move among providers in the highly improbable event of a catastrophic failure of one of them, the above constraints make that a time-consuming process for all users. . . . Notwithstanding their tremendous scale and ability to support existing customers with 'capacity on demand,' such vendors do not make a habit of operating with sufficient spare capacity to accommodate a significant piece of their competitors' business quickly and easily.'').

[527] *See supra* note 514.

include additional scenarios, will be modest, but they will vary across CCAs because of differences in the markets and participants they serve.

A commenter stated that CCAs underestimate the range of scenarios that might threaten their survival [528] and that scenario analyses impose small costs while yielding greatly enhanced transparency benefits.[529] A key benefit of final Rule 17Ad–26(a)(3) is that each CCA will revisit the question of what might threaten its ability to carry out its core services. As certain CCAs update their RWPs in response to this new rule, they may conclude that they need to add new scenarios and that they need to discuss their scenarios in more detail. That notwithstanding, it will not be costly for CCAs to comply with the new rule, which is shown by the cost estimates that are presented in Part IV.C.1.j *infra*. The Commission is not mandating that all CCAs include a common list of specific scenarios in their RWPs because of differences across CCAs and the products cleared and markets served—scenarios that are essential at one CCA might be irrelevant at another CCA—and because the list of scenarios is likely to change through time and is thus not suited for a static list.[530]

d. Criteria That Could Trigger Implementation

Final Rule 17Ad–26(a)(4) requires RWPs to identify and describe (a) criteria that could trigger the CCA's implementation of the recovery and orderly wind-down plans and (b) the process that the CCA uses to monitor and determine whether the criteria have been met, including the governance arrangements applicable to such process.

As stated in the baseline analysis, each CCA's RWP identifies and describes, to varying degrees, criteria that could trigger the implementation of a recovery or orderly wind-down. The largest benefits of this rule likely will accrue to the markets in which the dominant CCAs currently have the least comprehensive RWPs in identifying and describing appropriate triggers. The *ex ante* identification and description of triggers likely will have the benefit of being a disciplining mechanism that signals when and how the CCA may act during periods of market stress. The Commission further believes that the ex-ante identification and description of triggers likely will lead CCAs to anticipate and prepare for market stress or other events that could lead to a recovery or wind-down. Each CCA will incur costs to bring its RWP into alignment with the final rule. The alignment costs will depend on the extent of the enhancements the CCA makes to its RWP.

e. Rules, Policies, Procedures, and Other Tools or Resources

Final Rule 17Ad–26(a)(5) requires RWPs to identify and describe the rules, policies, procedures, and any other tools or resources on which the CCA could rely in a recovery or orderly wind-down. The markets that likely will benefit the most from this requirement are the ones in which the dominant CCAs have the least comprehensive RWPs in describing how the rules, policies, procedures, tools, and other resources could be used during a recovery or wind-down. Making these changes to their RWPs likely will enable the CCAs to anticipate more fully how future crises might affect their operations, which should enhance their ability to respond and, accordingly, decrease the expected costs borne by CCAs, the participants, and other stakeholders in future crises. For example, if a CCA determines that it needs a new rule to respond to a specific scenario, the CCA may be better positioned to respond appropriately to that scenario if it arises.

Each CCA will incur costs to bring its RWP into alignment with the final rule. The alignment costs will depend on the extent of the enhancements the CCA makes to its RWP. CCAs that determine that they need to include more responses, different resources, or better descriptions will incur more costs as they make appropriate modifications to their RWPs. The costs to modify plans that require changes, including those that need to be expanded, will increase with the number of required changes such as the number of new rules the CCA adopts.

f. Procedures To Ensure Timely Implementation

Final Rule 17Ad–26(a)(6) requires RWPs to address how the rules, policies, procedures, and any other tools or resources identified in Rule 17Ad–26(a)(5) would ensure timely implementation of the RWP. As stated in the baseline analysis, each RWP mentions the concept of timeliness in either recovery or wind-down, but most RWPs do not list specific procedures to ensure the timely implementation of the RWP. A key benefit of this rule is that CCAs will address in their RWPs how the RWP will be implemented in a timely manner when the need arises. A timely start will increase the chance that the CCA is able to address the underlying problem quickly and with low costs to the various stakeholders. The benefits of this rule likely will accrue primarily to the markets in which the dominant CCAs add more or better rules, policies, procedures, tools, or other resources to ensure timely implementation of their RWPs.

Each CCA will incur costs to bring its RWP into alignment with the final rule. The alignment costs will depend on the extent of the enhancements the CCA makes to its RWP. The costs to modify plans that require changes, including those that need to be expanded to include additional rules, policies, procedures, or any other tool or resource will be modest because current RWPs already place some focus on timeliness as a desired feature.

g. Informing the Commission

Final Rule 17Ad–26(a)(7) requires the CCA to inform the Commission as soon as practicable when the CCA is considering implementing a recovery or orderly wind-down. As stated in the baseline analysis, each RWP generally refers to informing the Commission, but some plans inform the Commission *after* initiating a recovery or orderly wind-down. Providing notice to the Commission when the CCA is considering implementing a recovery or orderly wind-down may help ensure that the Commission can, from the start, dynamically monitor how a CCA engages the recovery or wind-down event consistent with its established RWPs and the requirements of Commission rules, to help mitigate the potential onward transmission of system risk and help ensure that a wind-down, if necessary, is orderly. These benefits likely will accrue primarily to the markets in which the dominant CCAs currently do not have a plan in place for informing the Commission as soon as practicable when the CCA is considering implementing a recovery or orderly wind-down.

One cost of the new rule is that CCAs will need to decide whether they have begun considering an implementation of either a recovery or an orderly wind-down. The marginal cost of such a determination is small, and it would

[528] *See* Muth at 2 (''A complex cocktail of incentives familiar to the Commission but too labyrinthine to elucidate here causes management to . . . underestimate the range of scenarios that might threaten entity survival'').

[529] *See id.* at 3 (''The requirement of explicit consideration in the recovery plan of what might lead to each scenario's coming into being and how the scenario might take shape (including prerequisite contemplated market conditions) imposes a small burden on compliance and risk functions in the entity while creating greatly-enhanced transparency to investors and regulators around how, how quickly, and under what conditions the entity may fail to meet obligations.'').

[530] *See infra* Part IV.D.1.

occur in the normal course of business, separate from the new requirement. For example, a CCA generally would be ''considering'' implementing a recovery when the clearing agency determines that a market event may result in uncovered losses, liquidity shortfalls, or capital inadequacies at the CCA following end-of-day settlement, or when the CCA anticipates that it will need to deploy prefunded financial resources or liquidity arrangements following end-of-day settlement in order continue meeting its regulatory obligations.[531] Those determinations would be made in absence of the final notification rule, and they do not therefore affect the rule's costs. Additionally, the primary focus for the CCA is on the timeliness of the notification to the Commission and not on its method or form.[532] The Commission can best ensure that actions appropriate to maintaining financial stability can be made if it is notified when a CCA is ''considering'' action, rather than when a CCA has already begun to implement its RWP. For example, the Commission or other authorities may evaluate the available actions or tools to address or mitigate financial stability concerns in response to market events.

A commenter stated that CCA management may face disincentives to candid communication with the Commission about considering implementing a recovery or orderly wind-down because of concerns about other implications of such reporting, including the potential for harm in future shareholder litigation.[533] We acknowledge that there may be conflicting incentives for individual managers regarding any regulatory reporting, but we do not believe that these conflicting incentives would undermine the intended benefits nor do they alter the reporting and disclosure obligations of CCAs or their publicly-traded affiliates. These conflicting incentives are already present in the regulatory structure. All CCAs currently maintain frequent communication with Commission staff about potentially sensitive information. And CCAs are already required to disclose key information about their operations to various third parties that may be considerably more extensive than that which is mandated by new Rule 17Ad–26(a)(7). Pursuant to Commission rules, for example, clearing participants generally will be notified of circumstances related to a participant default, the potential for a portfolio auction, and the use of default management tools that may precede a recovery or wind-down event.[534] Finally, while CCAs' publicly-traded affiliates will need to consider whether public disclosure to investors is appropriate when considering implementing a recovery or orderly wind-down, those considerations exist regardless of any required notification to the Commission.

Each CCA will incur costs to bring its RWP into alignment with the final rule. The alignment costs will depend on the extent of the enhancements the CCA makes to its RWP. The costs to modify plans that require changes, including those that need to change their RWPs to notify the Commission before the RWP implementation, likely will be modest because current RWPs already place some focus on informing the Commission. If the CCA ever experiences an event that causes it to consider implementing a recovery or orderly wind-down, it will have to devote nominal resources to inform the Commission as soon as practicable.

h. Testing

Final Rule 17Ad–26(a)(8) requires RWPs to include procedures for testing the CCA's ability to implement the RWPs at least every 12 months, including by (a) requiring the CCA's participants and, when practicable, other stakeholders to participate in the testing of its plans; (b) requiring that such testing would be in addition to testing pursuit to paragraph (e)(13) of 17 CFR 240.17ab–22; (c) providing for reporting the results of the testing to the CCA's board of directors and senior management; and (d) specifying the procedures for, as appropriate, amending the plans to address the results of such testing.

A few commenters stated that CCAs need considerable latitude in designing and executing their testing obligations because including participants and certain other stakeholders in plan testing may be inefficient and perhaps inappropriate due to costs, sharing of private and confidential information, and other reasons.[535] The Commission recognizes that there are certain efficiencies from allowing each CCA to customize its testing due to differences between markets, cleared products, participant types, and testing obligations from other regulators and final Rule 17Ad–26(a)(8) allows a CCA to designate in its policies and procedures that certain participants, or categories of participants, be designated for participation in certain tests. It may not always be appropriate to include certain participants in all aspects of testing.[536] The different types of products that each CCA clears helps determine the type, resources, and expertise of stakeholders that participate in these testing exercises. For example, in testing of loss allocation tools, where losses could be assigned to a participant, it may be useful to include participants in the testing to allow them to understand when they can be expected to bear losses and how those losses would be absorbed. In testing that involves business losses or certain types of non-default losses, it may be less appropriate to have participants participate in the testing.

One commenter stated that new testing requirements would require significant investment of time and resources by a CCA's most critical personnel, both in the planning of the test and in the likely manual execution of the test for many CCAs.[537] The Commission acknowledges that CCAs will incur costs every 12 months to plan and execute their tests. The CCAs' most critical personnel will likely need to be actively engaged in the execution of the tests, including monitoring both market conditions and the CCAs' resources as the situation develops. As stated above, including critical personnel in testing may increase the overall cost of testing, but it is necessary because these critical personnel are best positioned to identify the planning and procedures that can help ensure timely and effective implementation of the RWP in the event of a future recovery or orderly wind-down.[538] Plan testing benefits CCAs because it helps them identify weakness during the testing that can be used to update their RWPs and it helps them gain practical skills that may be used during an actual recovery or wind-down event. These effects, in turn, improve the stability of the CCAs, which benefits not only their participants but also the broader financial markets. A key cost to the CCA during plan testing is the

[531] *See supra* Part II.C.7.

[532] *See supra* Part II.C.7.

[533] *See* Muth at 2 (''In the case of publicly-traded entities in particular, management may be understandably hesitant to make forward-looking pessimistic statements that may be unearthed in future shareholder litigation or insolvency proceedings.''); *id.* (''A complex cocktail of incentives familiar to the Commission but too labyrinthine to elucidate here causes management to . . . underestimate the amount of information that needs to be communicated effectively to 'relevant authorities' to illuminate threats to the entity's solvency, especially when those threats are high-magnitude, low-frequency risks.'').

[534] *See supra* Part II.C.7.

[535] *See* CCP12 at 4; DTCC at 9; ICE at 4.

[536] *See supra* Part II.C.8.c.

[537] *See* OCC at 10.

[538] *See supra* Part II.C.8.b.

opportunity cost of the critical personnel being less available to attend to other matters, and participants will incur related costs from their participation.

In the RWP Proposing Release, the Commission requested comment on how costly it will be for CCAs to test their plans as required in Rule 17Ad–26(a)(8).[539] No commenter, including the CCAs, provided estimated plan-testing costs or other information that would aid the Commission in quantifying the costs for CCAs to test their RWPs every 12 months.[540] Because under the final rule the nature and scope of the required testing is dependent on the needs of each CCA, it would be impracticable to estimate the cost of testing without particularized information about the elements and testing scenarios of each CCA's RWP after the RWPs have been brought into alignment with the final rule. Final Rule 17Ad–26(a)(8) allows a CCA to retain discretion to organize and design its testing scenarios to ensure that testing exercises produce effective tests of the elements of the RWP. This discretion means that each CCA may test different default and non-default scenarios from one another. Additionally, final Rule 17Ad–26(a)(8) does not create parameters around the number of scenarios a CCA is required to test. Final Rule 17Ad–26(a)(8) also allows a CCA to designate in its policies and procedures certain participants, or categories of participants, for participation in certain tests. Each CCA will rely on different resources and expertise of stakeholders depending on its market and the type of products that the CCA clears, and the number and identity of those participants will also vary.[541] The Commission would need more information about the type and number of scenarios each CCA is testing or the type and number of participants each CCA will be designating in order to quantify the cost of testing.

A few commenters also stated that testing requirements in Rules 17Ad–22 and 17Ad–26 should be harmonized to the extent possible due to high testing costs that outweigh benefits of independent testing.[542] The testing requirements in new Rule 17Ad–26(a)(8) are in addition to those in Rule 17Ad–22(e)(13), and each test must be performed because RWP testing may require consideration of scenarios and testing of procedures that go beyond default management. For example, recovery includes the actions taken to address uncovered losses and replenishment of prefunded resources, and wind-down includes actions taken when resources have been exhausted, necessitating the permanent cessation, sale, or transfer of one or more of the CCA's core services. Nevertheless, each CCA is allowed to structure the planning, execution, and analysis of each test in a way that improves efficiency and reduces its aggregate testing costs for itself, its participants, and its other stakeholders so long as the testing exercise addresses the distinct elements of the separate testing requirements.[543] A more comprehensive testing exercise may make it less costly to assemble a representative set of participants and other key stakeholders, as well as the board, producing a more effective testing exercise.

The new test required by final Rule 17Ad–26(a)(8) cannot be subsumed by the default management tests under Rule 17Ad–22(e)(13) because it goes beyond default management by including, for example, recovery, which includes the actions taken to address uncovered losses and replenishment of prefunded resources, and wind-down, which includes actions taken when resources have been exhausted, necessitating the permanent cessation, sale, or transfer of one or more of the CCA's core services.

As stated in the baseline analysis, only a few RWPs refer to plan testing. The markets that likely will benefit the most from this requirement are those in which the dominant CCAs have the least comprehensive policies around testing in their RWPs because those CCAs likely will create procedures for more frequent testing and the inclusion of more stakeholders, and those changes likely will help ensure that those RWPs remain current and take into account changing system and market conditions. Additionally, the testing will help the test participants and other stakeholders better understand the recovery and orderly wind-down processes, and it may make them more efficient in the event of an actual recovery or wind-down event because of their practice going through a dry-run recovery and orderly wind-down. Contrary to the suggestion of a commenter, the participation in a real test yields benefits for the various stakeholders that they cannot learn through other methods, including reading the CCAs' RWPs.[544]

The upfront costs to begin testing as required by the new rule may not be large for the four CCAs that do not mention plan testing in their RWPs because they might be able to leverage existing requirements around default management testing under Rule 17Ad–22(e)(13) as they develop their new plans that are distinct from those existing requirements.[545] The corresponding testing costs for the CCAs' participants and, when practicable, other stakeholders likely will be moderate, in part because the CCAs are already required to include such entities in their default procedures testing under Rule 17Ad–22(e)(13). The costs for any subsequent RWP amendments in response to the annual testing likely will be small.

i. Board Review and Approval

Final Rule 17Ad–26(a)(9) requires RWPs to include procedures requiring review and approval of the plans by the board of directors of the CCA at least every 12 months or following material changes to the CCA's operations that would significantly affect the viability or execution of the plans, with such review informed, as appropriate, by the CCA's testing of the plans. As stated in the baseline analysis, each RWP refers to periodic plan reviews, typically annually or biennially.

The markets that likely will benefit the most from this requirement are those in which the dominant CCAs currently have the least comprehensive RWPs in addressing plan review because they would create more frequent procedures for review, and more frequent reviews, in turn, should help ensure that RWPs remain current and consider any changes to the CCAs' operations.

There are costs associated to this new requirement. The board of directors of some CCAs will need to devote additional time and resources as they move to a review cycle of at least every 12 months, and they will need to review material changes to the CCA's operations that would significantly affect the viability or execution of the plans. For those CCAs that review every two years, moving to a review at least every 12 months will increase their

[539] RWP Proposing Release, *supra* note 18, at 34740 (''44. How costly will it be for covered clearing agencies to test their plans as required in proposed Rule 17ad–26(a)(8)? What costs will be incurred by the participants and, when practicable, other stakeholders? Will any of these costs substantively vary based on whether or not the current RWP includes testing?'').

[540] *See infra* note 542.

[541] *See supra* Table 1 for the number of participants at CCAs as of Aug. 2024.

[542] *See* DTCC at 10–11; ICE at 4–5; OCC at 10–11 (concluding that imposing additional testing requirements or mandating a separate, RWP-designed test would be duplicative of ongoing testing and would introduce unnecessary and potentially significant burdens without a proportionate benefit); CCP12 at 4–5; CFA at 4.

[543] *See supra* Part II.C.8.b.

[544] CCP12 at 4.

[545] *See* 17 CFR 240.17ad–22(e)(13); *supra* Part II.C.8.b.

costs by as much as a factor of two. We estimate that the cost of the additional time and resources for each additional review will be minor because we do not anticipate that this type of review will take many hours or many board resources.

Material changes to the CCA's operations may result in changes to the RWP. Those RWP changes that are material will be reviewed by the board. We estimate that the cost of the additional time and resources by the CCA to determine which RWP changes are material will be minor because we do not anticipate that this determination will take many hours or many resources.

Each CCA will incur costs to bring its RWP into alignment with the final rule. The alignment costs will depend on the extent of the enhancements the CCA makes to its RWP. The costs to modify plans that have biennial reviews to replace them with annual reviews will be modest. The costs to review RWPs after material changes to the CCAs' operations will depend on the nature and number of material changes that result in new reviews.

j. Quantified Costs of Written Policies and Procedures Associated With Final Rule 17Ad–26

The Commission has estimated the implementation and ongoing cost of final Rule 17Ad–26. The estimated average implementation cost for one CCA to review and update existing policies and procedures is about $49,000.[546] These approximate costs are the same as those estimated at the proposal stage for final Rule 17Ad–26 adjusted for inflation, and we did not receive any specific comments on this estimate.

One commenter provided feedback on the additional cost of obtaining Commission approval for any updated policies and procedures pursuant to Rule 19b–4.[547] The commenter stated that a two order of magnitude multiplier should be applied to the Commission's cost estimate because the rule-change process requires a broad cross-section of a CCA management and staff, as well as interactions with SEC staff.[548] The Commission acknowledges that once a CCA has reviewed and updated its policies and procedures the CCA will have to submit its plan modifications to the Commission for review, public comment, and approval as required by Rule 19b–4, which requires time and effort from both CCA management and staff. As the number of consultations between CCA management and SEC staff increases during the process of submitting the CCA's plan modifications, there will be corresponding increases in costs, as the commenter suggested. But the magnitude of these costs will be far less than the commenter suggested (*i.e.,* 100 times more than the costs associated with reviewing and updating policies and procedures). Instead, the Commission estimates this process will conservatively cost about $74,000 per CCA.[549] In addition, to the extent that a CCA must submit an advance notice, the Commission estimates a cost of about $73,000 per CCA.[550]

Final Rule 17Ad–26 will also impose ongoing costs on a CCA. The rule will require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance costs with respect to existing 17 CFR 240.17ad–22(e)(2) (''Rule 17Ad–22(e)(2)''),[551] the Commission estimates that the ongoing monitoring and compliance activities required by final Rule 17Ad–26 will impose an annual cost on CCAs of $19,000 per CCA.[552] These approximate costs are the same as those estimated at the proposal stage for final Rule 17Ad–26 adjusted for inflation, and we did not receive any specific comments on this estimate.

2. Amendments to Rule 17Ad–22(e)(6)

Rule 17Ad–22(e)(6) requires CCAs that provide central counterparty services to establish a risk-based margin system to manage their credit exposures to their participants. The final amendment to Rule 17Ad–22(e)(6)(ii) will strengthen the requirements: (a) by requiring that CCAs monitor intraday risk exposures to their participants on an ongoing basis, and (b) by providing additional specificity to the circumstances in which CCAs should have policies and procedures in place to make intraday margin calls. The final amendment to Rule 17Ad–22(e)(6)(iv) will strengthen the requirements by ensuring that CCAs can meet their Rule 17Ad–22(e)(6) obligations when their price data or other substantive inputs are not available by including procedures to use price data or other

[546] The $49,000 estimate is based on the following calculations: $11,460 (blended hourly rate for assistant general counsel at $573 for 20 hours) + $22,450 (blended hourly rate for compliance attorney at $449 for 50 hours) + $8,575 (blended hourly rate for business risk analyst at $245 for 35 hours) + $6,600 (blended hourly rate for senior risk management specialist at $440 for 15 hours) ≈ $49,000. Salaries for estimates presented in this section are derived from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead. *See infra* note 610. As stated in the baseline analysis, some RWPs are more aligned with the nine elements that are part of final Rule 17Ad–26 than are other RWPs, so the estimated cost may vary.

[547] Davidson at 12 (''As a general matter the cost estimates in the document for the CCAs to conform to the proposed rules are ridiculously low. Rule change processes require the participation by a much broader cross-section of CCA management and staff . . . . A two order of magnitude multiplier on the current document's estimates would not overcount the cost to comply.'').

[548] *Id.* (''Furthermore, the 'informal' interaction with [Trading & Markets] staff frequently continues for multiple months, always involving Legal Department staff and frequently requiring the engagement of domain experts as well. All this happens before a formal submission is permitted, and the post formal submission process also requires a significant amount of interaction, although that process draws more on Legal than domain expert resources.'').

[549] Assuming that the distribution of responsibility among CCA staff for completing the Rule 19b–4 submission process is similar to the distribution for reviewing and updating policies and procedures, *see supra* note 546 (estimating 120 hours of total CCA staff time), the commenter's estimate would imply that CCA staff would spend an average of approximately 12,000 hours per submission, inclusive of the 120 hours to review and update policies and procedures. The Commission disagrees that this is a reasonable estimate of the number of hours for the process. Rather, the Commission has previously estimated—after receiving no comments on a similar estimate in the proposing release—that submitting a proposed rule change through the Rule 19b–4 process takes a CCA 34 hours for an average rule change filing and 129 hours for a novel or complex rule change filing. *See* Process for Submissions for Review of Security-Based Swaps for Mandatory Clearing and Notice Filing Requirements for Clearing Agencies; Technical Amendments to Rule 19b–4 and Form 19b–4 Applicable to All Self-Regulatory Organizations, Release No. 34–67286 (June 28, 2012) 77 FR 41602, 41631 & n.211 (July 13, 2012). Using the time for a novel or complex rule change filing as a conservative estimate, the Commission assumes that the CCA staff with the highest hourly cost involved in reviewing and updating CCA policies and procedures (*i.e.,* an assistant general counsel) performs all 129 hours of tasks associated with the Rule 19b–4 submission process, resulting in an estimated cost of $74,000. Specifically, the $74,000 estimate is based on the following calculations: $73,917 (blended hourly rate for assistant general counsel at $573 for 129 hours) ≈ $74,000. If instead the estimated time for an average rule change filing were used, the estimated cost would be $19,000 based on the following calculations: $19,482 (blended hourly rate for assistant general counsel at $573 for 34 hours) ≈ $19,000.

[550] The Commission estimates an additional cost of $73,000 based on the following calculations: $52,716 (blended hourly rate for assistant general counsel at $573 for 92 hours) + $20,440 (blended hourly rate for attorney at $511 for 40 hours) ≈ $73,000. *See id.* at 41632 & nn.213–14 (estimating time for Advance Notice).

[551] *See* CCA Standards Adopting Release, *supra* note 5, at 70892 (discussing Rule 17Ad–22(e)(2)).

[552] The $19,000 estimate is based on the following calculations: $5,730 (blended hourly rate for assistant general counsel at $573 for 10 hours) + $13,470 (blended hourly rate for compliance attorney at $449 for 30 hours) ≈ $19,000. *See infra* note 611. As stated in the baseline analysis, some RWPs are more aligned with the nine elements that are part of final Rule 17Ad–26 than are other RWPs, so the estimated cost may vary.

substantive inputs from an alternate source or to use a risk-based margin system that does not similarly rely on the unavailable or unreliable substantive inputs.

a. Monitoring Exposure and Intraday Margin Calls

CCAs use intraday margin calls as one of their tools to manage their credit exposures to their participants. The final amendment to Rule 17Ad–22(e)(6)(ii) requires CCAs to monitor exposure on an ongoing basis and to make intraday margin calls as frequently as circumstances warrant, possibly including when risk thresholds specified by the CCA are breached or when the products cleared or markets served display elevated volatility, which would help reduce, but not eliminate, their credit exposure to their participants. When facing special circumstances such as these, the CCA is required to document when it determines not to make an intraday call pursuant to its written policies and procedures required under amended Rule 17Ad–22(e)(6)(ii)(C).

Two commenters stated that members' intraday actions can create large negative externalities with respect to other participants and the CCA itself that the CCA could mitigate through its margin policies.[553] One commenter stated that margin calls benefit participants and the CCA, which, in turn, serves the interests of broader market stability.[554] The Commission recognizes that the structure of these clearing markets may permit certain negative externalities, and it has crafted the amendment to Rule 17Ad–22(e)(6)(ii) to reduce those externalities, which will, in turn, improve market stability. The final amendment affords CCAs latitude in crafting their updated margin procedures that will better reduce these negative externalities given their products cleared and markets served.

Each CCA will have to determine how to operationalize ''on an ongoing basis'' and ''as frequently as circumstances warrant'' given its own market and participants. Each CCA will also need to ensure that its systems can monitor exposure and make margin calls at those frequencies. As discussed in the baseline analysis, each CCA is already capable of monitoring exposure and collecting margin on an intraday basis; nevertheless, some CCAs might need to make changes to align with the final amendment, such as increasing the frequency of exposure monitoring and improving their information technology, so they can process more frequent scheduled and *ad hoc* intraday margin calls. As facts and circumstances change through time, CCAs might need to change how they operationalize these new requirements, including changing the frequency of potential scheduled and *ad hoc* intra-day margin calls.

To the extent a CCA currently aligns with the final amendment, it will not experience new benefits from the final amendment. Nevertheless, the amendment will have incremental benefits for the market because it will ensure that the CCAs continue to meet the standard of the final amendment with which they are currently aligned and that any new CCA that provides central counterparty services meets the same standard.

In addition to updating policies and procedures surrounding the risk-based margin systems that require changes, some CCAs might need to update IT and other systems in order to assess, impose, and collect intraday margin on a more frequent basis. The costs to modify the risk-based margin systems that require changes will be modest because CCAs have already incurred the initial costs of building their risk management infrastructure, including the ability to make intraday margin calls based on some sort of intraday monitoring. Once those costs have been incurred and amortized, the variable costs of modifying the *frequency* of the monitoring, and of additional margin calls, are likely low.

To the extent that the final amendment results in CCAs being positioned to make more unscheduled margin calls, participants may face increased liquidity-management costs whether or not the CCAs actually make more unscheduled margin calls. Several commenters highlighted the potential for increased margin calls to impose increased liquidity costs on the CCAs' participants and their clients,[555] and several commenters explicitly stated that CCAs, in order to reduce participants' liquidity costs, must make the triggers for intraday margin calls known to their participants.[556] A CCA's margin methodology constitutes a material aspect of its operations, meaning that it should be considered part of a CCA's stated policies, practices, or interpretations under Exchange Act Rule 19b–4. As such, a CCA's margin methodology is subject to the filing obligations applicable to SROs under section 19(b) of the Exchange Act regarding any proposed rule or proposed change to its rules. Through the notice and comment process, market participants and the general public will have transparency into a CCA's margin call methodology. This information will enable the participants to reduce their liquidity costs to the extent they incorporate it into their liquidity models. That notwithstanding, a CCA's policies and procedures regarding intraday margin generally should consider concerns such as procyclicality, so not every margin call can be perfectly predicted by the participants.

One commenter stated that it is more costly for participants to respond to margin calls late in the trading day than early in the trading day because, in part, the United States is the last major market to close each day due to the geographic position of the International Date Line.[557] The Commission recognizes that margin calls are costly for participants, that those costs may potentially rise near the end of the trading day, and that those costs may potentially be higher during times of market stress; nevertheless, these time-varying costs are not unique to the clearing market. Some participants might adjust their liquidity models to control for the costs of late-in-day *ad hoc* margin calls that CCAs might make.

A few commenters stated that CCAs should be quick to return margin if markets revert during the trading day, and no commenter recommended against it.[558] The Commission is unaware of any CCA that routinely returns margin on an intraday basis today even though no SEC rule would

[553] *See* Better Markets at 2 (''The requirement that covered clearing agencies monitor intraday exposure responds to the risks that may arise intraday. A CCP faces the risk that its exposure to its participants can change rapidly as a result of intraday changes in price, positions, or both, including adverse price movements, as well as participants building larger positions through new trading (and settlement of maturing trades). For these reasons, a CCP must monitor and address such risks on an ongoing basis.''); *see also* SIFMA at 4 (''Failure to collect and maintain adequate margin from one clearing member transfers the risk of that deficiency to the other clearing members and market participants.'').

[554] *See* SIFMA at 6 (''SIFMA believes that the making of such calls is essential to prudent risk management by a Clearing Agency and thus provides meaningful benefits not only to the Clearing Agency, but also to market participants and serves the interests of financial stability by protecting the Clearing Agency from default risk.'').

[555] *See* Davidson at 9; Better Markets at 7; ICI at 10 (stating ''the unpredictability of such margin calls means that funds must keep a portion of their assets in highly liquid assets in anticipation of potential ad hoc intraday margin calls, which may lower returns for fund investors''), 11; SIFMA at 9; The Associations at 2; ICE at 2.

[556] *See* Better Markets at 7; ICI at 11; SIFMA at 5, 9.

[557] *See* Davidson at 9.

[558] *See* The Associations at 2; Davidson at 2; SIFMA at 8.

prohibit it. The Commission is not requiring CCAs to return some or all the newly collected intraday margin in the event of a same-day reversion, and it is instead leaving that decision to each CCA. The CCA will need to balance the benefits of potentially reduced liquidity costs to the participant from returning intraday margin against the benefits of potentially decreased risk to the CCA and its members from retaining intraday margin during periods of heightened asset volatility. The Commission's approach to Rule 17Ad–22(e) is to provide flexibility to CCAs, subject to their obligations and responsibilities as SROs under the Exchange Act, to design and structure their policies and procedures to take into account the differences among clearing agencies and their participants and differences through time.

Increased intraday margin calls may potentially result in procyclicality problems that exacerbate market stress: margin calls during periods of declining asset prices may cause participants to sell assets, putting further negative pressure on asset prices and the market that may negatively affect not just other participants but also may spill over into other CCAs and their markets.[559] This stress may be transmitted by participants that are members of more than one CCA when, for example, a margin call in one market makes a participant sell assets in a different market. The stress may also be transmitted by assets that are linked between markets, such as the link between option prices (OCC) and equity prices (NSCC). Various industry participants have expressed concerns that excessive intraday margin calls, especially unanticipated ones, have the potential to exacerbate liquidity issues for clearing members who would have to post new liquid collateral to the CCA with little notice,[560] and one commenter stated that the unanticipated margin call itself might cause the member firm to default.[561] On the other hand, such intraday margin calls reduce immediate credit risk for the CCAs during periods of market stress, which, in turn, reduces risk for the other participants of those CCAs.

CCAs, when deciding whether to make an intraday margin call exception, generally should consider these concerns about procyclicality and potential participant default.[562] Notwithstanding their written policies and procedures that would require a CCA to issue a margin call in a particular situation, the CCA may choose to make an exception to its policies and procedures and not make a call, including in a situation where the CCA believes that procyclicality is a substantive risk or that the risk of the default of a particular participant is transient, perhaps due to the CCA's knowledge of the participant's portfolio. CCAs' ability to make exceptions based on their particular facts and circumstances allows them to balance these competing risks during future crises.[563]

b. Reliable Sources of Timely Price Data and Other Substantive Inputs

CCAs have risk-based margin systems that, to different degrees, align with the final amendment to Rule 17Ad–22(e)(6)(iv), with the exception of at least one CCA that likely would need to implement additional changes to its risk-based margin system to ensure that it could continue to meet its obligations under Rule 17Ad–22(e)(6) in the event of the unavailability of a substantive input from a third party. If that one CCA were to lose access to its price data or other inputs, it may be unable to perform its core payment, clearing, and settlement services, and that, in turn, may force it into an orderly wind-down, which would have negative implications for its participants and the broader financial system.

The incremental benefits of the final amendment beyond the baseline lie primarily in expanding the scope of this rule beyond price data and further specifying the nature of the procedures that a CCA uses if such data or inputs are not readily available or reliable and in ensuring that any new CCA has that same standard of the final amendment. These benefits are substantial because the final amendment reduces the risk that the CCA fails to provide its core payment, clearing, and settlement services in future periods of high market stress.[564] For example, the Options Clearing Corporation cleared a year-to-date average daily volume of 47.4 million contracts through April 2024, and DTCC reported that the average daily cleared broker-to-broker transactions was $1.9 trillion in 2023.[565] Because there is increased activity in the financial markets at the end of the trading day,[566] even a one-hour price data feed malfunction near the end of the trading day could affect the normal processing of millions of options contracts and hundreds of billions of dollars of equity transactions. Moreover, the unavailability of price data at one CCA that is closely interconnected to another CCA [567] could result in negative spillover effects that spread to that other CCA.

In the RWP Proposing Release, the Commission requested comment on how costly it will be for CCAs to secure the use of price data or substantive inputs from an alternate source.[568]

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[559] One commenter agrees with the Commission's analysis of procyclicality. *See* The Associations at 2 (''Intraday margin calls can cause procyclical impacts to markets, especially if these calls are unpredictable for clearing participants.'').

[560] *Revisiting Procyclicality: The Impact of the COVID Crisis on CCP Margin Requirements,* Futures Indus. Ass'n (Oct. 2020), *available at https://www.fia.org/sites/default/files/2020-10/FIA_WP_Procyclicality_CCP%20Margin%20Requirements.pdf.*

[561] *See* ICE at 2 (''ICE does not believe the Commission has considered the costs associated with the procyclical effects that intraday margin calls can have, potentially exacerbating credit and liquidity concerns with clearing members and in extreme cases causing market participant defaults.'').

[562] *See* Part II.A.2.b.iii.

[563] *See* OCC at 4 (''However, while OCC agrees with goal of ensuring that this capability can be exercised when and as needed, we are concerned that imposing a requirement to establish strict quantitative thresholds that will trigger an otherwise unscheduled margin call would prevent the CCA from applying its judgment and expertise to determining whether the benefit of collecting that margin for its own purposes at that moment outweighs these possible procyclical impacts.'').

[564] One commenter stated that the proposed amendment to Rule 17Ad–22(e)(6)(iv) should be scaled back because, in part, no CCA has ever had an input-price failure that it was unable to resolve through its normal business operations (*see* ICE at 3); nevertheless, evolving market conditions, including high levels of growth in some cleared markets, justify regulatory changes to reduce the risk of future failures.

[565] *See* OCC, *Press Release OCC April 2024 Monthly Volume Data* (May 2, 2024), *available at https://www.theocc.com/newsroom/views/2024/05-02-occ-april-2024-monthly-volume-data* and *DTCC 2023 Annual Report, supra* note 471.

[566] The two busiest trading periods for both equities and equity options are usually immediately after the opening bell and immediately before the closing bell.

[567] For instance, OCC and NSCC have an information-sharing agreement to facilitate the settlement and delivery of physically-settled stock options cleared by OCC via NSCC. *See* Securities Exchange Act Release No. 37731 (Sept. 26, 1996), 61 FR 51731 (Oct. 3, 1996) (SR–OCC–96–04 and SR–NSCC–96–11) (Order Approving Proposed Rule Change Related to an Amended and Restated Options Exercise Settlement Agreement Between the Options Clearing Corporation and the National Securities Clearing Corporation); Securities Exchange Act Release No. 43837 (Jan. 12, 2001), 66 FR 6726 (Jan. 22, 2001) (SR–OCC–00–12) (Order Granting Accelerated Approval of a Proposed Rule Change Relating to the Creation of a Program to Relieve Strains on Clearing Members' Liquidity in Connection With Exercise Settlements); and Securities Exchange Act Release No. 58988 (Nov. 20, 2008), 73 FR 72098 (Nov. 26, 2008) (SR–OCC–2008–18 and SR–NSCC–2008–09) (Notice of Filing and Order Granting Accelerated Approval of Proposed Rule Changes Relating to Amendment No. 2 to the Third Amended and Restated Options Exercise Settlement Agreement).

[568] RWP Proposing Release, *supra* note 18, at 34739 (''40. How costly is it for covered clearing agencies to secure the use of price data or substantive inputs from an alternate source? Must the data or substantive inputs subscription be purchased outright, or can the covered clearing agency, for a lower fee, purchase an option to use

Several commenters addressed the costs of the proposed amendments to Rule 17Ad–22(e)(6)(iv). Some commenters stated that (a) alternate data sources are too costly and unlikely to substantively affect margin calculations,[569] (b) the alternate data may not be available in the market for the desired circumstances,[570] and (c) it may not be feasible to switch to a new source at the desired time due to capacity, timing, and other constraints.[571] No commenter presented estimated data costs, and no commenter presented any data, methodology, or basis for estimating such costs.

In the RWP Proposing Release, the Commission requested comment on how costly it will be for CCAs to secure the use of alternate risk-based margin systems.[572] Several commenters stated that developing an alternate risk-based margin system is too costly.[573] The amendments being adopted in this release do not mandate the use or development of an alternate risk-based margin system. Rather, the amendments require that a CCA must use procedures for addressing scenarios when price data or other substantial inputs become unavailable or unreliable to ensure that the CCA can meet its credit obligations to its participants, and that such procedures must include either: (i) price data or substantive inputs from an alternate source; or (ii) if the CCA does not use an alternate source, a risk-based margin system that does not rely on the unavailable or unreliable substantive input. As discussed in the baseline analysis, several CCAs already use one or both of these alternatives in their current margin systems. Even for a CCA that does not have policies and procedures developed to address this issue, the costs to develop such policies and procedures will not be very large because their experience dealing with periodic input failures means that they are already familiar with the risks of failures and the processes for dealing with those failures.

c. Quantified Costs of Written Policies and Procedures Associated With Final Amendments to Rule 17Ad–22(e)(6)

The estimated costs for the final amendment to Rule 17Ad–22(e)(6) may require a CCA to make fairly substantial changes to its policies and procedures. Based on the similar policies and procedures requirements and the corresponding estimates previously made by the Commission for several rules in the CCA Standards where the Commission anticipated similar costs,[574] the Commission estimates that each CCA will incur a one-time cost of about $59,000.[575] Additionally, the Commission estimates that the cost of obtaining Commission approval for any updated policies and procedures pursuant to Rule 19b–4 will conservatively cost about $23,000 per CCA.[576]

The final amendments to Rule 17Ad–22(e)(6) will also impose annual costs on the CCAs. The final rule will require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the final rule. Based on the similar reporting requirements and the corresponding estimates previously made by the Commission for several rules in the CCA Standards where the Commission anticipated similar costs,[577] the Commission estimates that the ongoing activities required by the amendments to Rule 17Ad–22(e)(6) will impose an annual cost of about $31,000.[578]

3. Other Compliance Costs

We have considered the potential effects on entities that are implementing other recently adopted rules during the compliance period for these amendments.

Consistent with its long-standing practice, the Commission's economic analysis in each adopting release considers the incremental benefits and costs for the specific rule—that is, the benefits and costs stemming from that rule compared to the baseline. The Commission acknowledges that complying with more than one rule in the same time period may entail compliance costs that will be higher than if the rules were to be complied with separately. The Commission identified several rules for which the compliance periods overlap, in part, with the compliance periods for the amendments, but the compliance dates adopted by the Commission in recent rules are generally spread out over a period extending to January 2026.[579]

Entities subject to the amendments may be subject to one or more other recently adopted rules depending on whether those entities' activities fall within the scope of the other rules. Specifically, the Treasury Clearing Adopting Release applies to certain clearing agencies for U.S. Treasury securities and certain participants of the CCAs.[580] The Rule 10c–1a Adopting Release also applies to certain CCAs [581]—although due to differing requirements, these rules may not all apply to any given CCA. Where overlap in compliance periods exists, the Commission acknowledges that there may be additional costs on those entities that are subject to one or more other rules.

the data and substantive inputs only when its primary sources prove inadequate?'').

[569] *See* CCP12 at 2 (stating that if the Commission prescribed a definition of ''substantive input,'' a CCA may be forced to ''obtain, often at great expense, alternate data sources for inputs with limited utility and minimal or no impact on margin calculations.''); OCC at 5 (stating that requiring CCAs to develop and maintain an entire alternate risk-based margin system would be prohibitively expensive and operationally burdensome); *id.* at 2 and 4.

[570] *See* DTCC at 4.

[571] *See* Davidson at 7.

[572] RWP Proposing Release, *supra* note 18, at 34740 (''41. How costly is it for covered clearing agencies to secure the use of alternate risk-based margin systems? Would covered clearing agencies create their own alternate risk-based margin systems, or would they secure access to one from a third party, and, if so, at what cost?'').

[573] *See* ICE at 2–3 (stating that the Commission has not ''recognized the considerable costs to [CCAs], clearing firms and other market participants that would be required to develop and implement alternative margin models to address a remote and theoretical problem with price or other data inputs''); OCC at 2, 4–5; CCP12 at 3.

[574] *See* CCA Standards Adopting Release, *supra* note 5, at 70892, 70895–97 (discussing Rules 17Ad–22(e)(2) and (13)). Although the rule amendment is with respect to Rule 17Ad–22(e)(6), these Rules present the best overall comparison to the current rule amendment, in light of the nature of the changes needed to implement the proposal here and what was proposed in the CCA Standards.

[575] The $59,000 estimate is based on the following calculations: $11,460 (blended hourly rate for assistant general counsel at $573 for 20 hours) + $17,960 (blended hourly rate for compliance attorney at $449 for 40 hours) + $6,504 (blended hourly rate for computer operations manager at $542 for 12 hours) + $8,160 (blended hourly rate for senior programmer at $408 for 20 hours) + $11,000 (blended hourly rate for senior risk management specialist at $440 for 25 hours) + $4,056 (blended hourly rate for senior business analyst at $338 for 12 hours) ≈ $59,000. Salaries for estimates presented in this section are derived from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead. *See infra* note 603.

[576] See supra note 549.

[577] *See* CCA Standards Adopting Release, *supra* note 5, at 70893, 70895–96 (discussing Rules 17Ad–22(e)(6) and (13)).

[578] The $31,000 estimate is based on the following calculations: $11,674 (blended hourly rate for compliance attorney at $449 for 26 hours) + $10,045 (blended hourly rate for business risk analyst at $245 for 41 hours) + $9,240 (blended hourly rate for senior risk management specialist at $440 for 21 hours) ≈ $31,000. *See infra* note 604.

[579] *See supra* Part IV.B (listing recent rule adoptions and their respective compliance dates) and Part III (listing compliance dates).

[580] *See* Treasury Clearing Adopting Release, *supra* note 62, at 2717, 2791.

[581] *See* Rule 10c–1a Adopting Release, *supra* note 457, at 75647, 75717–18. The final rule adds ''registered clearing agencies'' to the proposed rule's scope of entities that are permitted to act as reporting agents, which was limited to brokers or dealers. *Id.* at 75656. However, a registered clearing agency may elect not to be a reporting agent. *Id.* at 75733.

4. Efficiency, Competition, and Capital Formation

a. Efficiency

CCAs current policies and procedures, at a high level, largely align with final Rule 17Ad–26. As stated in the baseline, all CCAs make at least some reference in their current RWPs to each of the nine required elements of this new rule with the exception of plan testing.[582] Therefore, the Commission does not expect substantive efficiency changes due to the final rule.

The final amendment to Rule 17Ad–22(e)(6)(ii) will benefit participants by providing increased specificity around the methods used by CCAs to assess intraday margin calls, thus enabling more efficient planning in the use of scarce margin funds. This will reduce any negative effects on participants' liquidity costs, as previously described.[583]

The final amendment to Rule 17Ad–22(e)(6)(iv) will increase informational efficiency by promoting the quick and reliable dissemination of information that allows for price discovery during periods when price data or other substantive inputs are not available to the CCA. Calculating margin and managing and disseminating risk information are core competencies of all CCAs, and various stakeholders rely on those data outputs. By requiring secondary sources, the final amendment may mitigate the reduction in efficiency that would otherwise happen when primary sources fail at a CCA that does not have secondary sources. Having the ability to continue calculating margin and disseminating that information to participants even when primary data are not available will prevent a reduction in informational efficiency when price data or other substantive inputs are not available.

b. Competition

As described in the baseline, CCAs are currently not subject to strong competitive pressures given high start-up costs, the network effects that are inherent in the clearing business, their subsequent historical consolidation by market segments (options clearing for OCC, equities clearing for NSCC, fixed income clearing for FICC, etc.), and clearing mandates that require the use of clearing services.[584] In terms of potential new entrants in the market for clearing and settlement services, the incremental costs of the final Rule 17Ad–26 and the final amendment to Rule 17Ad–22(e)(6)(ii) are small and, therefore, unlikely to be noteworthy barriers to entry. The final amendment to Rule 17Ad–22(e)(6)(iv) may have a modest effect on competition because it imposes additional start-up costs that a new competitor would have to assume to enter the CCA market.

As discussed above, the Commission acknowledges that overlapping compliance periods may in some cases increase costs. We acknowledge that to the extent overlap occurs between the compliance periods of this rule and the compliance periods of other rules, there could be costs that could affect competition. However, the compliance dates are spread over a period extending to January 2026. We therefore do not expect the risk of negative competitive effects from increased compliance costs from overlapping compliance periods to be significant.

c. Capital Formation

The Commission expects the effects of the final rule and amendments on capital formation to be ancillary because the final rule and amendments focus on issues related to secondary market trading and not on issues related to primary market issuances. To the degree that market participants view equity and fixed-income CCAs as more reliable venues for risk transfer, they may increase their activity and therefore signal a demand for more capital-creating securities.

D. Reasonable Alternatives to the Final Rule and Amendments

1. Establish Precise Triggers for Implementation of RWPs Across All CCAs

Instead of requiring CCAs to identify and implement their own triggers to recovery and orderly wind-down procedures, the Commission could adopt a more prescriptive approach and determine specific triggers that all CCAs would be required to follow. For example, the Commission could specify that exhausting prefunded financial resources in the waterfall structure of a CCA would immediately trigger a recovery or wind-down procedure.[585] Alternatively, the Commission could require a trigger when unfunded commitments to the CCP are called upon and reach a specific dollar number.

In the RWP Proposing Release, the Commission asked, ''[s]hould the Commission prescribe any particular triggers, whether qualitative or quantitative? For example, should the Commission require that a CCA should consider using the exhaustion of its prefunded resources as a trigger?'' [586] One commenter proposed both a list of required triggers and a list of triggers that each CCA should consider.[587] This alternative would harmonize triggers across all CCAs, and it would create a single standard that market participants could rely on, eliminating any confusion or ambiguity attendant to different triggers. Nevertheless, CCAs are active in different markets (equities, bonds, options, CDS, etc.), have different organizational structures, and focus on different risks. As an example, one of the OCC's focus areas is monitoring option sensitivities, and, as a result, its margin models and waterfall structure are responsive to that consideration while FICC, on the other hand, focuses on duration and convexity so its waterfall structure is more responsive to those risks. Having this more prescriptive approach would be unresponsive to the characteristics of each market and could expose CCAs to recovery or wind-down triggers that are not aligned with its actual risks. One

[582] Three CCAs do not mention plan testing in their RWPs. *See supra* Part IV.B.3.h.

[583] SIFMA at 4 (''Failure to collect and maintain adequate margin from one clearing member transfers the risk of that deficiency to the other clearing members and market participants.'').

[584] *See* SIFMA at 10–11.

[585] *See* John W. McPartland and Rebecca Lewis, *The Goldilocks Problem: How to Get Incentives and Default Waterfalls ''Just Right'',* 41 Econ. Persps. 1, 2 (Mar. 2017), *available at https://www.chicagofed.org/publications/economic-perspectives/2017/1-mcpartland-lewis* (''All CCPs have a default waterfall that provides financial resources for managing a clearing member default. The waterfall consists of both prefunded resources and unfunded obligations. When a clearing member defaults, the CCP must continue to meet defaulter's financial obligations, whose performance it guarantees, to the non-defaulting clearing members, attempt to find clearing members willing accept the defaulter's clients, and return to a matched book status by liquidating or auctioning off the defaulter's positions. If the CCP cannot find other clearing members willing to onboard the defaulter's clients, then the clients' positions must be liquidated to restore the CCP to a matched book status. The default waterfall provides funding to cover the cost of meeting the defaulter's obligations and liquidating the defaulter's positions, as well as, if necessary, those of its clients.'').

[586] RWP Proposing Release, *supra* note 18, at 34725 (''25. Proposed Rule 17ad–26 would also require that the RWP identify triggers but does not prescribe a list of specific triggers. Should the Commission prescribe any particular triggers, whether qualitative or quantitative? For example, should the Commission require that a covered clearing agency should consider using the exhaustion of its prefunded resources as a trigger?'').

[587] The Associations at 17 (''We propose for the Commission to provide a list of triggers that are required to be covered in the RWP, and ideally another list of triggers that a clearing agency should consider. For this second list, a clearing agency could determine (yet explain) that a trigger is not relevant for the products cleared and/or markets served by the clearing agency.'').

commenter agreed with the Commission's conclusion.[588]

2. Establish Specific Scenarios and Analyses

Instead of requiring CCAs to identify scenarios that may prevent them from being able to provide their core payment, clearing, and settlement services, the Commission could adopt a more prescriptive approach and identify specific scenarios in new Rule 17Ad–26 that each CCA must include in its RWP. For example, the Commission could identify the scenario of the default of the CCA's one or two largest participants and scenarios of specific business risks such as the default of a custodian bank or a significant cyber-attack.[589] The Commission could also require more detail regarding how each of the CCAs analyzes these scenarios.[590]

This alternative approach may reduce compliance costs by establishing the precise scope of the rule, which could allow CCAs to tailor their RWPs to the enumerated requirements for identifying scenarios and analyses. In addition, the inclusion of elements similar to those prescribed by other agencies that also regulate several CCAs could result in certain efficiencies and reduced costs for those CCAs.[591]

However, the adopted rule's approach retains flexibility compared with this alternative by permitting the scenarios to vary across CCAs because the underlying risks vary across markets and participants. Because participants vary in size and economic significance across CCAs, scenarios invoking a pre-determined number of failures or fixed dollar amounts may have significantly different effects in one CCA than in another.

3. Establish Specific Rules, Policies, Procedures, Tools, and Resources

Instead of requiring CCAs to describes the rules, policies, procedures, and any other tools or resources the CCA would rely upon in the event of a recovery or during an orderly wind-down to address the scenarios identified in their RWPs, the Commission could adopt a more prescriptive approach and identify in new Rule 17Ad–26 the rules, policies, procedures, and any other tools or resources for all CCAs. The Commission could also require in new Rule 17Ad–26 more detail regarding how a CCA analyzes its rules, policies, procedures, tools, and resources.[592]

This alternative approach may reduce compliance costs by establishing the precise scope of the rule, which could allow CCAs to tailor their RWPs to the enumerated requirements for describing rules, policies, procedures, and other tools or resources. In addition, the inclusion of elements similar to those prescribed by other agencies that also regulate several CCAs could result in certain efficiencies and reduced costs for those CCAs.[593]

However, it is better to permit the rules, policies, procedures, and any other tools or resources to vary across CCAs because the underlying risks and resources vary across CCAs. For example, a CCA that clears products of longer duration may have a greater need for a tear-up tool that extinguishes a participant's positions in certain circumstances than a CCA that clears contracts with a relatively short duration. In addition, the overall volume of transactions settled by a CCA may affect the choice of its liquidity tools or resources, as the CCA would have to ensure that it had sufficient liquidity resources to complete settlement.

4. Require the Identification of Interconnections and Interdependencies

In addition to the requirements with respect to service providers set forth in final Rule 17Ad–26(a)(2), the Commission could require that the CCA's RWP identify any financial or operational interconnections and interdependencies that the CCA has with other market participants. This would allow for consideration of the effect of the multiple roles and relationships that a single financial entity may have with respect to the CCA including affiliated entities and third parties (*e.g.,* a single entity that acts as both a clearing member and a settlement bank and a liquidity provider).[594]

A CCA is already required to establish, implement, maintain, and

[588] OCC at 8 (''Prescribing bright line, quantitative triggers that would apply to all CCAs, irrespective of their unique structures and the features of the markets they serve and products they clear, would run the risk of creating market instability by potentially forcing a CCA to initiate its RWP even when the CCA has not yet made the determination that it was necessary. For this reason, we support the Commission's determination to allow CCAs to identify appropriate triggers for their individual circumstances.'') (citation omitted).

[589] Additional such scenarios that could be enumerated in new Rule 17Ad–26 could include any or all of the following scenarios: (A) credit losses or liquidity shortfalls created by single and multiple clearing member defaults; (B) liquidity shortfall created by a combination of clearing member default and a failure of a liquidity provider to perform; (C) settlement bank failure; (D) custodian or depository bank failure; (E) losses resulting from investment risk; (F) losses from poor business results; (G) financial effects from cybersecurity events; (H) fraud (internal, external, and/or actions of criminals or of public enemies); (I) legal liabilities, including those not specific to the CCA's business as a CCA; (J) losses resulting from interconnections and interdependencies among the CCA and its parent, affiliates, and/or internal or external service providers; (K) losses resulting from interconnections and interdependencies with other CCAs; and (L) losses resulting from issues relating to services that are ancillary to the CCA's critical services. It could also include scenarios involving multiple failures (*e.g.,* a member default occurring simultaneously, or nearly so, with a failure of a service provider) that, in the judgment of the CCA, are particularly relevant to its business.

[590] That is, the Commission could require in new Rule 17Ad–26 that the RWP include an analysis that includes: (A) a description of the scenario; (B) the events that are likely to trigger the scenario; (C) the CCA's process for monitoring for such events; (D) the market conditions, operational and financial difficulties and other relevant circumstances that are likely to result from the scenario; (E) the potential financial and operational impact of the scenario on the CCA and on its clearing members, internal and external service providers and relevant affiliated companies, both in an orderly market and in a disorderly market; and (F) the specific steps the CCA would expect to take when the scenario occurs, or appears likely to occur, including, without limitation, any governance or other procedures that may be necessary to implement the relevant recovery tools and to ensure that such implementation occurs in sufficient time for the recovery tools to achieve their intended effect.

[591] *See supra* Part IV.B.2; RWP Proposing Release *supra* note 18, at 34716–7 nn.68–69; *id.* at 34724–25 (discussing Request for Comment 15, and 21–23); *see also supra* notes 418 and 419 for commenters who recommended that the Commission and CFTC coordinate to ensure that any final rules are aligned or structured so that dually registered clearinghouses (*i.e.,* CCAs registered with the Commission and SIDCOs registered with the CFTC) can efficiently comply with both Commission and CFTC rules.

[592] For example, the Commission could require in new Rule 17Ad–26 that the RWP include an analysis that includes: (A) a description of the tools that the CCA would expect to use in each scenario; (B) the order in which each tool would be expected to be used; (C) the time frame within which the tool would be used; (D) the governance and approval processes and arrangements within the CCA for the use of each of the tools available, including the exercise of any available discretion; (E) the processes to obtain any approvals external to the CCA (including any regulatory approvals) that would be necessary to use each of the tools available, and the steps that might be taken if such approval is not obtained; (F) the steps necessary to implement the tools; (G) the roles and responsibilities of all parties, including non-defaulting participants; (H) whether the tool is mandatory or voluntary; (I) an assessment of the associated risks from the use of each tool to non-defaulting clearing members and their customers, linked financial market infrastructures, and the financial system more broadly; and (J), for wind-down, an assessment of the likelihood that the tool would result in orderly wind-down.

[593] *See supra* Part IV.B.2; RWP Proposing Release *supra* note 18, at 34716–7 nn.68–69; *id.* at 34724–25 (discussing Request for Comment 15, 20–22, and 27; *see also supra* notes 418 and 419 for commenters who recommended that the Commission and CFTC coordinate to ensure that any final rules are aligned or structured so that dually registered clearinghouses (*i.e.,* CCAs registered with the Commission and SIDCOs registered with the CFTC) can efficiently comply with both Commission and CFTC rules.

[594] More specifically, a bank holding company structure may operate through a set of legal entities (*e.g.,* a broker-dealer/futures commission merchant separate from a bank, which is in turn distinct from an information technology service provider), each of which has different relationships with the CCA.

enforce written policies and procedures reasonably designed to identify, monitor, and manage risks related to any link the CCA establishes with one or more other clearing agencies, financial market utilities, or trading markets.[595] This requirement, in conjunction with the requirement to identify and describe service providers for core services and to specify to which core service they relate, should accomplish the same general objective, making this reasonable alternative redundant to the final policy choice.

5. Establish a Specific Monitoring Frequency for Intraday Margin Calls

The final amendment to Rule 17Ad–22(e)(6)(ii) expressly incorporates the requirement of intraday monitoring to ensure that such monitoring is done on an ongoing basis. One reasonable alternative is to prescribe the necessary frequency of monitoring as opposed to ''on an ongoing basis.'' For example, CCAs could be required to monitor exposure every 5 or 15 minutes.

However, monitoring on an ongoing basis is preferable because a fixed, pre-specified monitoring frequency may not be responsive enough to risk differences that exist across the markets served by the CCAs or to volatility changes that may happen through time.

6. Adopt Only Certain Elements of Rule 17Ad–26

Instead of adopting all nine elements of Rule 17Ad–26, the Commission could adopt a subset of the elements. For example, the Commission could drop the element to identify service providers or the element to address how the CCA would ensure that the service providers would continue to perform in the event of a recovery and during an orderly wind-down. Alternatively, the Commission could drop the element for plan review or the element for plan testing.

It is better to adopt all nine elements of Rule 17Ad–26 because each element helps ensure that the plan is fit for purpose and the combination of all components provides sufficient and comprehensive identification of how a CCA would perform in the event of a recovery and during an orderly wind-down. As described above, compliance with each of the nine elements by CCAs will contribute to reducing systemic risk and benefit other CCAs, other market participants, and investors in the event of a recovery or wind-down.[596]

7. Focus Intraday Margin Requirements on a Subset of CCAs

As an alternative to implementing the intraday margin amendments on a blanket basis, the Commission could adopt a more tailored approach that imposes the requirements only on a subset of CCAs that operate in certain markets such as those markets with the highest levels of activity [597] or those markets that have only one CCA.[598] A more tailored market-level risk-based approach would adjust to the size and systemic importance of each market, which would reduce, under this alternative, the compliance costs for the CCAs in the markets with less activity or with more than one available clearing agency.

However, the amendments already include an appropriate adjustment for market-level risk insofar as they would require the CCAs to consider their own particular facts and circumstances when aligning with the final rules. For example, the final amendment to Rule 17Ad–22(e)(6)(ii) would require CCAs to have the operational capacity to make intraday margin calls ''as frequently as circumstances warrant,'' and that frequency is expected to vary across markets and through time.

V. Paperwork Reduction Act

As discussed in the RWP Proposing Release, the amendments to Rule 17Ad–22(e)(6) and new Rule 17Ad–26 contain ''collection of information'' requirements within the meaning of the Paperwork Reduction Act of 1995 (''PRA'').[599] The Commission submitted the proposed collections of information to the Office of Management and Budget (''OMB'') for review in accordance with the PRA. With respect to Rule 17Ad–22(e)(6), the title of the information collection is ''Clearing Agency Standards for Operation and Governance'' (OMB Control No. 3235–0695). With respect to Rule 17Ad–26, the title of the information collection is ''Rule 17Ad–26: CCA Recovery and Orderly Wind-Down Plans'' (OMB Control No. OMB 3235–0811). 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 OMB control number.

A. Amendments to Rule 17Ad–22(e)(6)

As discussed in the RWP Proposing Release, respondents under Rule 17Ad–22(e)(6) are CCAs that provide CCP services, of which there are currently five.[600] The Commission continues to anticipate that one additional entity may seek to register as a clearing agency to provide CCP services in the next three years, and so for purposes of this adoption the Commission has assumed six respondents.

As discussed in the RWP Proposing Release,[601] the purpose of this collection of information is to enable a CCA to have the authority and operational capacity to monitor intraday exposures on an ongoing basis and to collect intraday margin in certain specified circumstances. The collection is mandatory. To the extent that the Commission receives confidential information pursuant to this collection of information, such information would be kept confidential subject to the provisions of applicable law.[602]

As discussed further in Part II, the amendments to Rule 17Ad–22(e)(6) require a CCA to establish, implement, maintain, and enforce written policies and procedures. The rule amendment contains similar provisions to preexisting rules for CCAs (*i.e.,* Rule 17Ad–22(e)(6)(ii) and (iv)), but also imposes additional requirements that did not appear in preexisting Rule 17Ad–22(e)(6). As a result, a respondent CCA will incur burdens of reviewing and updating existing policies and procedures to consider whether it complies with the amendments to Rule 17Ad–22(e)(6) and, in some cases, may need to create new policies and procedures to comply with the amendments to Rule 17Ad–22(e)(6). For example, a CCA likely will need to review its existing margin methodology

[595] 17 CFR 240.17ad–22(e)(20).

[596] *See supra* Part IV.C.1.

[597] Activity could be measured in different ways, including the number or value of cleared transactions. Average daily settlement value is much higher in the equity market (NSCC) than it is in the fixed income market (FICC). DTCC Annual Report, *supra* note 471.

[598] The following securities markets have only one central counterparty: exchange-traded equity options (OCC), government securities (FICC), mortgage-backed securities (FICC), and equity securities (NSCC). The market for central securities depository services has only one provider (DTC). The credit default swaps market is served by LCH SA and ICC.

[599] *See* 44 U.S.C. 3501 *et seq.*

[600] Since the Commission issued the RWP Proposing Release, one CCA that provides CCP services has withdrawn its registration. *See* Release No. 34–98902 (Nov. 9, 2023), 88 FR 78428 (Nov. 15, 2023).

[601] RWP Proposing Release, *supra* note 18, at 34740.

[602] *See, e.g.,* 5 U.S.C. 552. Exemption 4 of the Freedom of Information Act provides an exemption for trade secrets and commercial or financial information obtained from a person and privileged or confidential. *See* 5 U.S.C. 552(b)(4). Exemption 8 of the Freedom of Information Act provides an exemption for matters that are contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions. *See* 5 U.S.C. 552(b)(8).

and consider whether any additional changes are necessary to ensure that it can meet the additional requirements of the rule.

The estimated PRA burdens for the amendment to Rule 17Ad–22(e)(6) will require a respondent CCA to make fairly substantial changes to its policies and procedures. The amendments to Rule 17Ad–22(e)(6) also would impose ongoing burdens on a respondent CCA by requiring ongoing monitoring and compliance activities with respect to the written policies and procedures created or modified in response to the rule.

The Commission received no comments regarding the PRA estimates in the RWP Proposing Release; however, in addressing other comments on the proposed rule, the Commission has modified the rule text to add a requirement to document when the CCA determines not to make an intraday margin call, pursuant to its written policies and procedures for intraday margin collection, and this affects the burdens with respect to ongoing activities under the rule. Accordingly, the Commission continues to estimate that respondent CCAs would incur an aggregate one-time burden of approximately 774 hours to review existing policies and procedures and create new or modified policies and procedures.[603] With respect to ongoing activities required by the amendments to Rule 17Ad–22(e)(6), the Commission now estimates that the final rule amendments will impose an aggregate annual burden on respondent CCAs of 528 hours.[604]

B. New Rule 17Ad–26

As discussed in the RWP Proposing Release,[605] respondents under Rule 17Ad–26 are CCAs, of which there are currently six. The Commission anticipates that one additional entity may seek to register as a CCA in the next three years, and so for purposes of this adoption the Commission has assumed seven respondents.

As discussed in the RWP Proposing Release,[606] the purpose of the collections under Rule 17Ad–26 is to ensure that CCAs include a set of particular items in the RWPs currently required under Rule 17Ad–22(e)(3)(ii). The collections are mandatory. To the extent that the Commission receives confidential information pursuant to this collection of information, such information would be kept confidential subject to the provisions of applicable law.[607]

Because Rule 17Ad–22(e)(3)(ii) already required CCAs to maintain RWPs, Rule 17Ad–26 will impose on a CCA similar burdens as when, for example, Rule 17Ad–22(e)(2) was proposed and CCAs generally had governance arrangements in place at that time.[608] Based on the Commission's review and understanding of the CCAs' existing RWPs,[609] respondent CCAs generally have written rules, policies, and procedures similar to the requirements that will be imposed under Rule 17Ad–26. The PRA burden imposed by the rule will therefore be minimal and will likely be limited to the review of current policies and procedures and updating existing policies and procedures where appropriate to ensure compliance with the rule.

Rule 17Ad–26 will also impose ongoing burdens on a respondent CCA by requiring ongoing monitoring and compliance activities with respect to the written policies and procedures created or modified in response to the rule.

The Commission received no comments regarding the PRA estimates in the RWP Proposing Release and estimates that respondent CCAs will incur an aggregate one-time burden of approximately 840 hours to review and update existing policies and procedures.[610] The Commission also continues to estimate that the ongoing activities required by Rule 17Ad–26 will impose an aggregate annual burden on respondent CCAs of 280 hours.[611]

C. Chart of Total PRA Burdens

Name of information collection	Type of burden	Number of respondents	Initial burden per entity	Aggregate initial burden	Ongoing burden per entity	Aggregate ongoing burden
17Ad–22(e)(6)	Recordkeeping	[a] 6	129	774	88	528
17Ad–26	Recordkeeping	7	120	840	40	280

[a] *See supra* notes 600, 605, and accompanying text (explaining that Rule 17Ad–22(e)(6) applies only to CCAs that provide CCP services, whereas Rule 17Ad–26 applies to all CCAs, which includes those that provide both CCP and CSD services).

VI. Regulatory Flexibility Act

The Regulatory Flexibility Act (''RFA'') requires the Commission, in promulgating rules, to consider the impact of those rules on small entities.[612] Section 603(a) of the Administrative Procedure Act,[613] as amended by the RFA, generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules to determine the impact of such rulemaking on ''small

[603] This figure was calculated as follows: (Assistant General Counsel for 20 hours) + (Compliance Attorney for 40 hours) + (Computer Operations Manager for 12 hours) + (Senior Programmer for 20 hours) + (Senior Risk Management Specialist for 25 hours) + (Senior Business Analyst for 12 hours) = 129 hours × 6 respondent clearing agencies = 774 hours. When compared to the estimates in the RWP Proposing Release, this reflects a reduction in the number of respondents from seven to six.

[604] This figure was calculated as follows: (Compliance Attorney for 26 hours + Business Risk Analyst for 41 hours + Senior Risk Management Specialist for 21 hours) = 88 hours × 6 respondent clearing agencies = 528 hours. When compared to the estimates in the RWP Proposing Release, this reflects an increase of one burden hour for each of the Compliance Attorney, Business Risk Analyst, and Senior Risk Management Specialist, as well as a reduction in the number of respondents from seven to six.

[605] RWP Proposing Release, *supra* note 18, at 34741.

[606] *Id.*

[607] *See, e.g.,* 5 U.S.C. 552 *et seq.* Exemption 4 of the Freedom of Information Act provides an exemption for trade secrets and commercial or financial information obtained from a person and privileged or confidential. *See* 5 U.S.C. 552(b)(4). Exemption 8 of the Freedom of Information Act provides an exemption for matters that are contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions. See 5 U.S.C. 552(b)(8).

[608] *See* CCA Standards Adopting Release, *supra* note 5, at 70892 (discussing Rule 17Ad–22(e)(2)).

[609] *See, e.g., supra* Part IV.B.3 (providing an overview of current RWPs).

[610] This figure was calculated as follows: ((Assistant General Counsel for 20 hours) + (Compliance Attorney for 50 hours) + (Business Risk Analyst for 35 hours) + (Senior Risk Management Specialist for 15) = 120 hours × 7 respondent clearing agencies = 840 hours. When compared to the estimates in the RWP Proposing Release, this reflects a reduction in the number of respondents from eight to seven.

[611] This figure was calculated as follows: ((Assistant General Counsel for 10 hours) + Compliance Attorney for 30 hours)) × 7 respondent clearing agencies = 280 hours. When compared to the estimates in the RWP Proposing Release, this reflects a reduction in the number of respondents from eight to seven.

[612] *See* 5 U.S.C. 601 *et seq.*

[613] 5 U.S.C. 603(a).

entities.'' [614] Section 605(b) of the RFA states that this requirement shall not apply to any proposed rule which, if adopted, would not have a significant economic impact on a substantial number of small entities.[615] The Commission certified in the RWP Proposing Release, pursuant to section 605(b) of the RFA, that the proposed rules would not, if adopted, have a significant impact on a substantial number of small entities. The Commission received no comments on this certification.

A. Clearing Agencies

The amendments to Rule 17Ad–22(e)(6) and new Rule 17Ad–26 apply to CCAs, which are registered clearing agencies that provide the services of a CCP or CSD. For the purposes of Commission rulemaking and as applicable to these rule amendments and new rule, a small entity includes, when used with reference to a clearing agency, a clearing agency that (i) compared, cleared, and settled less than $500 million in securities transactions during the preceding fiscal year, (ii) had less than $200 million of funds and securities in its custody or control at all times during the preceding fiscal year (or at any time that it has been in business, if shorter), and (iii) is not affiliated with any person (other than a natural person) that is not a small business or small organization.[616]

Based on the Commission's existing information about the clearing agencies currently registered with the Commission,[617] all such registered clearing agencies exceed the thresholds defining ''small entities'' set out above. While other clearing agencies may emerge and seek to register as clearing agencies with the Commission, no such entities would be ''small entities'' as defined in 17 CFR 240.0–10 (''Exchange Act Rule 0–10'').[618] In any case, registered clearing agencies can only become subject to the rule amendments and new rule adopted in this release when they meet the definition of a CCA, as described above. Accordingly, the Commission preliminarily believes that any such registered clearing agencies will exceed the thresholds for ''small entities'' set forth in Exchange Act Rule 0–10.

B. Certification

For the reasons described above, the Commission certifies that the amendments to rule 17Ad–22(e)(6) and new Rule 17Ad–26 do not have a significant economic impact on a substantial number of small entities for purposes of the RFA.

VII. Other Matters

The Commission considers the provisions of the final amendments to be severable to the fullest extent permitted by law. ''If parts of a regulation are invalid and other parts are not,'' courts ''set aside only the invalid parts unless the remaining ones cannot operate by themselves or unless the agency manifests an intent for the entire package to rise or fall together.'' *Bd. of Cnty. Commissioners of Weld Cnty.* v. *EPA,* 72 F.4th 284, 296 (D.C. Cir. 2023); see *K Mart Corp.* v. *Cartier, Inc.,* 486 U.S. 281, 294 (1988). ''In such an inquiry, the presumption is always in favor of severability.'' *Cmty. for Creative Non-Violence* v. *Turner,* 893 F.2d 1387, 1394 (D.C. Cir. 1990). Consistent with these principles, while the Commission believes that all provisions of the final amendments are fully consistent with governing law, if any of the provisions of these amendments, or the application thereof to any person or circumstance, is held to be invalid, the Commission intends that such invalidity shall not affect other provisions or application of such provisions to other persons or circumstances that can be given effect without the invalid provision or application. In particular, the amendments to Rule 17Ad–22(e)(6) pertaining to a CCA's written policies and procedures for its risk-based margin system operate independently from new Rule 17Ad–26 pertaining to a CCA's written policies and procedures for its RWPs.

Pursuant to the Congressional Review Act,[619] the Office of Information and Regulatory Affairs has designated these rules as a not a ''major rule,'' as defined by 5 U.S.C. 804(2).

Statutory Authority

The Commission is adopting amendments to Rule 17Ad–22(e)(6) and new Rule 17Ad–26 under the Commission's rulemaking authority in the Exchange Act, particularly section 17(a), 15 U.S.C. 78q(a), section 17A, 15 U.S.C. 78q–1, and section 23(a), 15 U.S.C. 78w(a), and the Dodd-Frank Act, particularly section 805 of the Clearing Supervision Act, 15 U.S.C. 5464.

List of Subjects in 17 CFR Part 240

Reporting and recordkeeping requirements, Securities.

In accordance with the foregoing, title 17, chapter II of the Code of Federal Regulations is amended as follows:

PART 240—GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

■ 1. The authority citation for part 240 continues to read, in part, as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z–2, 77z–3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78c–3, 78c–5, 78d, 78e, 78f, 78g, 78i, 78j, 78j–1, 78j–4, 78k, 78k–1, 78*l,* 78m, 78n, 78n–1, 78*o,* 78*o*–4, 78*o*–10, 78p, 78q, 78q–1, 78s, 78u–5, 78w, 78x, 78dd, 78*ll,* 78mm, 80a–20, 80a–23, 80a–29, 80a–37, 80b–3, 80b–4, 80b–11, 1681w(a)(1), 6801–6809, 6825, 7201 *et seq.,* and 8302; 7 U.S.C. 2(c)(2)(E); 12 U.S.C. 5221(e)(3); 18 U.S.C. 1350; Pub. L. 111–203, 939A, 124 Stat. 1376 (2010); and Pub. L. 112–106, sec. 503 and 602, 126 Stat. 326 (2012), unless otherwise noted.

* * * * *

Section 240.17ad–22 is also issued under 12 U.S.C. 5461 *et seq.*

* * * * *

■ 2. Amend § 240.17ad–22 by revising paragraphs (e)(6)(ii) and (iv) to read as follows:

§ 240.17ad–22 Standards for clearing agencies.

* * * * *

(e) * * *

(6) * * *

(ii)(A) Marks participant positions to market and collects margin (including variation margin or equivalent charges if relevant) at least daily;

(B) Monitors intraday exposures on an ongoing basis;

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[614] Section 601(b) of the RFA permits agencies to formulate their own definitions of ''small entities.'' *See* 5 U.S.C. 601(b). The Commission has adopted definitions for the term ''small entity'' for the purposes of rulemaking in accordance with the RFA. These definitions, as relevant to this rulemaking, are set forth in 17 CFR 240.0–10.

[615] *See* 5 U.S.C. 605(b).

[616] *See* 17 CFR 240.0–10(d).

[617] The average daily value of equities trades cleared by NSCC in 2023 was $1.932 trillion; at FICC, the total net value of government securities transactions in 2022 was $2.019 trillion and the total net par value for mortgage-backed securities in 2023 was $58 trillion; and DTC settled a total of $446 trillion of securities in 2023. *See* DTCC, *2023 Annual Report,* at 39–40, *https://www.dtcc.com/-/media/Files/Downloads/Annual%20Report/2023/DTCC-2023-AR-Print.pdf.* In 2023, OCC cleared 11.052 billion options contracts. *See* OCC, *2023 Annual Report: 2023 Year in Review, https://annualreport.theocc.com/2023/year-in-review.* In addition, the notional value of CDS cleared by ICE was $18.8 trillion and $23.8 trillion in 2023 and 2022, respectively. *See* ICE, *2023 Annual Report,* at 60, *https://s2.q4cdn.com/154085107/files/doc_financials/2023/ar/597756_002_bmk.pdf.* The notional value of CDS cleared by LCH SA was €4,975 billion and €3,367 billion in 2023 and 2022, respectively. *See* LCH Group Holdings Ltd., *2023 Annual Report,* at 3, *https://www.lch.com/system/files/media_root/lch-group-holdings-limited-financial-statements.pdf.* In each case, these volumes exceed the $500 million threshold for small entities.

[618] *See* 17 CFR 240.0–10(d). The Commission based this determination on its review of public sources of financial information about registered clearing agencies.

[619] 5 U.S.C. 801 *et seq.*

(C) Includes the authority and operational capacity to make intraday margin calls, as frequently as circumstances warrant, including the following circumstances:

(*1*) When risk thresholds specified by the covered clearing agency are breached; or

(*2*) When the products cleared or markets served display elevated volatility; and

(D) Documents when the covered clearing agency determines not to make an intraday call pursuant to its written policies and procedures required under paragraph (e)(6)(ii)(C) of this section;

* * * * *

(iv)(A) Uses reliable sources of timely price data and other substantive inputs;

(B) Uses procedures (and, with respect to price data, sound valuation models) for addressing circumstances in which price data or other substantive inputs are not readily available or reliable, to ensure that the covered clearing agency can continue to meet its obligations under this section; and

(C) Such procedures under paragraph (e)(6)(iv)(B) of this section must include either:

(*1*) The use of price data or substantive inputs from an alternate source; or

(*2*) If it does not use an alternate source, the use of a risk-based margin system that does not rely on substantive inputs that are unavailable or unreliable;

* * * * *

■ 3. Section 240.17ad–26 is added to read as follows:

§ 240.17ad–26 Recovery and orderly wind-down plans of covered clearing agencies.

(a) The plans for the recovery and orderly wind-down of the covered clearing agency referenced in § 240.17ad–22(e)(3)(ii) must:

(1) Identify and describe the covered clearing agency's core payment, clearing, and settlement services and address how the covered clearing agency would continue to provide such core services in the event of a recovery and during an orderly wind-down, including by:

(i) Identifying the staffing roles necessary to support such core services; and

(ii) Analyzing how such staffing roles necessary to support such core services would continue in the event of a recovery and during an orderly wind-down;

(2)(i) Identify and describe any service providers for core services, specifying which core services each service provider supports; and

(ii) Address how the covered clearing agency would ensure that service providers for core services would continue to perform in the event of a recovery and during an orderly wind-down, including consideration of its written agreements with such service providers and whether the obligations under those written agreements are subject to alteration or termination as a result of initiation of the recovery and orderly wind-down plan;

(3) Identify and describe scenarios that may potentially prevent the covered clearing agency from being able to provide its core services identified in paragraph (a)(1) of this section as a going concern, including uncovered credit losses (as described in § 240.17ad–22(e)(4)(viii)), uncovered liquidity shortfalls (as described in § 240.17ad–22(e)(7)(viii)), and general business losses (as described in § 240.17ad–22(e)(15));

(4) Identify and describe criteria that could trigger the covered clearing agency's implementation of the recovery and orderly wind-down plans and the process that the covered clearing agency uses to monitor and determine whether the criteria have been met, including the governance arrangements applicable to such process;

(5) Identify and describe the rules, policies, procedures, and any other tools or resources on which the covered clearing agency would rely in a recovery or orderly wind-down;

(6) Address how the rules, policies, procedures, and any other tools or resources identified in paragraph (a)(5) of this section would ensure timely implementation of the recovery and orderly wind-down plan;

(7) Require the covered clearing agency to inform the Commission as soon as practicable when the covered clearing agency is considering implementing a recovery or orderly wind-down;

(8) Include procedures for testing the covered clearing agency's ability to implement the recovery and orderly wind-down plans at least every 12 months, including by:

(i) Requiring the covered clearing agency's participants and, when practicable, other stakeholders to participate in the testing of its plans;

(ii) Requiring that such testing be in addition to testing pursuant to § 240.17ad–22(e)(13);

(iii) Providing for reporting the results of such testing to the covered clearing agency's board of directors and senior management; and

(iv) Specifying the procedures for, as appropriate, amending the plans to address the results of such testing; and

(9) Include procedures requiring review and approval of the plans by the board of directors of the covered clearing agency at least every 12 months or following material changes to the covered clearing agency's operations that would significantly affect the viability or execution of the plans, with such review informed, as appropriate, by the covered clearing agency's testing of the plans.

(b) All terms used in this section have the same meaning as in the Securities Exchange Act of 1934, and unless the context otherwise requires, the following definitions apply for purposes of this section:

Affiliate means a person that directly or indirectly controls, is controlled by, or is under common control with the covered clearing agency.

Orderly wind-down means the actions of a covered clearing agency to effect the permanent cessation, sale, or transfer of one or more of its core services, as identified by the covered clearing agency pursuant to paragraph (a)(1) of this section, in a manner that would not increase the risk of significant liquidity, credit, or operational problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system.

Recovery means the actions of a covered clearing agency, consistent with its rules, procedures, and other *ex ante* contractual arrangements, to address any uncovered loss, liquidity shortfall, or capital inadequacy, whether arising from participant default or other causes (such as business, operational, or other structural weaknesses), including actions to replenish any depleted prefunded financial resources and liquidity arrangements, as necessary to maintain the covered clearing agency's viability as a going concern and to continue its provision of core services, as identified by the covered clearing agency pursuant to paragraph (a)(1) of this section.

Service provider for core services means any person, including an affiliate or a third party, that, through a written agreement for services provided to or on behalf of the covered clearing agency, on an ongoing basis, directly supports the delivery of core services, as identified by the covered clearing agency pursuant to paragraph (a)(1) of this section.

By the Commission.

Dated: October 25, 2024.

J. Matthew DeLesDernier,

Deputy Secretary.

[FR Doc. 2024–25570 Filed 11–15–24; 8:45 am]

BILLING CODE 8011–01–P