

SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 240

[Release No. 34–93614; File No. S7–19–21]

RIN 3235–AM76

Electronic Recordkeeping Requirements for Broker-Dealers, Security-Based Swap Dealers, and Major Security-Based Swap Participants

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule.

SUMMARY: The Securities and Exchange Commission (“Commission”) is proposing amendments to the electronic recordkeeping requirements for broker-dealers, security-based swap dealers (“SBSDs”), and major security-based swap participants (“MSBSPs”).

DATES: Comments should be received on or before January 3, 2022.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission’s internet comment form (<https://www.sec.gov/rules/submitcomments.htm>); or
- Send an email to rule-comments@sec.gov. Please include File Number S7–19–21 on the subject line.

Paper Comments

- Send paper comments to Vanessa A. Countryman, Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.
- All submissions should refer to File Number S7–19–21. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s internet website (<https://www.sec.gov/rules/proposed.shtml>). Comments are also available for website viewing and printing in the Commission’s Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Operating conditions may limit access to the Commission’s public reference room. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make publicly available.

We or the staff may add studies, memoranda, or other substantive items to the comment file during this rulemaking. A notification of the inclusion in the comment file of any such materials will be made available on our website. To ensure direct electronic receipt of such notifications, sign up through the “Stay Connected” option at www.sec.gov to receive notifications by email.

FOR FURTHER INFORMATION CONTACT: Michael A. Macchiaroli, Associate Director, at (202) 551–5525; Thomas K. McGowan, Associate Director, at (202) 551–5521; Randall W. Roy, Deputy Associate Director, at (202) 551–5522; Raymond A. Lombardo, Assistant Director, at (202) 551–5755; Joseph I. Levinson, Senior Special Counsel, at (202) 551–5598; or Timothy C. Fox, Branch Chief, at (202) 551–5687, Division of Trading and Markets, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–7010.

SUPPLEMENTARY INFORMATION: The Commission is proposing amendments to:

Commission reference	CFR citation
Rule 17a–4	17 CFR 240.17a–4.
Rule 18a–6	17 CFR 240.18a–6.

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I. Background

A. Introduction

Securities Exchange Act of 1934 (“Exchange Act”) Rule 17a–4 (“Rule 17a–4”)¹ sets forth record preservation requirements applicable to broker-dealers, including broker-dealers also registered as SBSDs or MSBSPs.² Exchange Act Rule 18a–6 (“Rule 18a–6”)³ sets forth record preservation requirements for SBSDs and MSBSPs that are not also registered as broker-dealers (“SBS Entities”).⁴ The record preservation requirements of Rule 18a–6 were modeled largely on Rule 17a–4.⁵ Pursuant to Sections 15F and 17(a) of the Exchange Act, the Commission is proposing amendments to Rules 17a–4 and 18a–6.⁶ Specifically, the proposal

¹ See 17 CFR 240.17a–4.

² As used in this release, the term “broker-dealer” includes broker-dealers that are also registered as SBSDs or MSBSPs.

³ See 17 CFR 240.18a–6.

⁴ As used in this release, the term “SBS Entity” refers to SBSDs and MSBSPs that are not also registered as broker-dealers.

⁵ See *Recordkeeping and Reporting Requirements for Security-Based Swap Dealers, Major Security-Based Swap Participants, and Broker-Dealers*, Exchange Act Release No. 87005 (Sept. 19, 2019), 84 FR 68550 (Dec. 16, 2019) (“SBSD/MSBSP Recordkeeping Adopting Release”).

⁶ Section 17(a) of the Exchange Act, in pertinent part, provides the Commission with authority to issue rules requiring broker-dealers to make and keep for prescribed periods such records as the Commission, by rule, prescribes as necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act. See 15 U.S.C. 78q(a). Section 15F(f)(1)(B)(i) of the Exchange Act provides

would amend the electronic record preservation and prompt production of records requirements of Rules 17a-4 and 18a-6.⁷

As discussed in greater detail in the sections below, the amendments to Rule 17a-4 would provide an audit-trail alternative to the current requirement that electronic records be preserved exclusively in a non-rewriteable, non-erasable format. The audit-trail alternative would require that firms preserve electronic records in a manner that permits the recreation of an original record if it is altered, over-written, or erased. Rule 18a-6 currently does not have a requirement to preserve electronic records: (1) In a manner that permits the recreation of an original record if it is altered, over-written or erased; or (2) exclusively in a non-rewriteable, non-erasable format. The amendments to Rule 18a-6 would provide that an electronic recordkeeping system of an SBS Entity without a prudential regulator (“nonbank SBS Entity”) must meet one of these two requirements. However, this proposed amendment would apply only to newly created records, and not to those created prior to the compliance date of proposed amendments, if adopted by the Commission.⁸

Rule 17a-4 currently requires a broker-dealer to engage a third party who has access to and the ability to download information from the broker-dealer’s electronic storage media to any acceptable medium under the rule. The third party must execute undertakings that it will provide access to the broker-dealer’s electronic records and provide them to the Commission and other securities regulators upon request. Rule 18a-6 currently does not have this requirement. The amendments to Rule 17a-4 would eliminate the third-party

that SBSBs and MSBSPs for which there is a prudential regulator shall keep books and records of all activities related to their business as an SBSB or MSBSP in such form and manner and for such period as may be prescribed by the Commission by rule or regulation. See 15 U.S.C. 78o-10(f)(1)(B)(i). Section 15F(f)(1)(B)(ii) of the Exchange Act provides that SBSBs and MSBSPs without a prudential regulator shall keep books and records in such form and manner and for such period as may be prescribed by the Commission by rule or regulation. See 15 U.S.C. 78o-10(f)(1)(B)(ii).

⁷ See paragraph (f) of Rule 17a-4 and paragraph (e) of Rule 18a-6 (setting forth the electronic record preservation requirements) and paragraph (j) of Rule 17a-4 and paragraph (g) of Rule 18a-6 (setting forth the prompt production of records requirements).

⁸ A nonbank SBSB would be able to apply the new requirements to legacy records by, for example, transferring them to an electronic recordkeeping system that preserves them: (1) In a manner that permits the recreation of an original record if it is altered, over-written or erased; or (2) exclusively in a non-rewriteable, non-erasable format.

access and undertakings requirements and replace them with a requirement that a senior officer of the broker-dealer provide the access and undertakings. The amendments to Rule 18a-6 would add an analogous senior officer access and undertakings requirement.

The amendments to Rules 17a-4 and 18a-6 would require a broker-dealer or SBS Entity, respectively, to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to those rules in a reasonably usable electronic format, if requested by a representative of the Commission. This means the record would need to be produced in an electronic format that is compatible with commonly used systems for accessing and reading electronic records. Electronic records produced in a proprietary electronic format that Commission staff and other securities regulators could not read using commonly available systems for accessing and reading electronic records would not be considered to be in a reasonably usable electronic format.

The amendments to Rule 17a-4 would eliminate a requirement that the broker-dealer notify its designated examining authority (“DEA”) before employing an electronic recordkeeping system. Finally, the amendments to Rules 17a-4 and 18a-6, among other things, would remove or replace text to make those rules more technology neutral and to improve readability.

B. Current Electronic Record Preservation Requirements

1. Rule 17a-4(f)

Exchange Act Rule 17a-3 (“Rule 17a-3”) requires a broker-dealer to make and keep current certain books and records.⁹ The required records include, among other records: (1) Blotters (or other records of original entry) containing an itemized daily record of all purchases and sales of securities; (2) ledgers (or other records) reflecting all assets and liabilities, income and expense, and capital accounts; (3) a securities record or ledger reflecting separately for each security as of the clearance dates all “long” or “short” positions; (4) a memorandum of each brokerage order; (5) a memorandum of each purchase or sale of a security for the account of the broker-dealer; and (6) a record of proprietary options positions. Rule 17a-4 requires a broker-dealer to preserve additional records if the broker-dealer makes or receives certain categories of records.¹⁰ These categories of records

include, among other records, check books, bank statements, bills receivable or payable, communications relating to the broker-dealer’s business as such, and written agreements. Rule 17a-4 also establishes retention periods for all records required to be made and kept current under Rule 17a-3 and preserved under Rule 17a-4 (generally three or six years). Additionally, Rule 17a-4 prescribes, among other things, how the records must be retained, including the requirements with respect to preserving records electronically.

The electronic record preservation requirements are set forth in paragraph (f) of Rule 17a-4 (“Rule 17a-4(f)”). These requirements were adopted by the Commission in 1997.¹¹ The Commission intended these requirements to be technology neutral but was guided by the predominant electronic storage method at that time: Using optical platters, CD-ROMs, or DVDs (collectively, “optical disks”).¹² In particular, the rule requires that the electronic recordkeeping system preserve the records exclusively in a “non-rewriteable, non-erasable” (also known as a “write once, read many” or “WORM”) format. The objective of the WORM requirement is to prevent the alteration, over-writing, or erasure of the records.

In addition to the WORM requirement, Rule 17a-4(f) requires, among other things, that the broker-dealer: (1) Notify its DEA prior to employing electronic storage media and at least 90 days before employing electronic storage media other than optical disk technology; (2) use electronic storage media that (a) verifies

¹¹ See *Reporting Requirements for Brokers or Dealers under the Securities Exchange Act of 1934*, Exchange Act Release No. 38245 (Jan. 31, 1997), 62 FR 6469 (Feb. 12, 1997) (“Rule 17a-4(f) Adopting Release”). The Commission proposed Rule 17a-4(f) in 1993 and at the same time the Commission staff published a no-action letter that the staff would not recommend enforcement action to the Commission if broker-dealers preserved required records using optical storage technology, subject to certain conditions. See *Reporting Requirements for Brokers or Dealers under the Securities Exchange Act of 1934*, Exchange Act Release No. 32609 (July 9, 1993), 58 FR 38092 (July 15, 1993) (proposing Rule 17a-4(f)); Letter from Michael A. Macchiaroli, Associate Director, Division of Market Regulation, Commission, to Michael D. Udoff, Chairman, Ad Hoc Record Retention Committee, Securities Industry Association (June 18, 1993) (staff no-action letter). A staff no-action letter (or other staff statement) represents the views of the staff. It is not a rule, regulation, or statement of the Commission. The Commission has neither approved nor disapproved its content. The staff no-action letter, like all staff statements, has no legal force or effect: it does not alter or amend applicable law, and it creates no new or additional obligations for any person.

¹² See Rule 17a-4(f) Adopting Release, 62 FR at 6470.

⁹ See 17 CFR 240.17a-3.

¹⁰ See, e.g., paragraphs (b)(2) through (16) of Rule 17a-4.

automatically the quality and accuracy of the recording process, (b) serializes the original and duplicate copies of the media, (c) time-dates the required retention period for the records stored on the media, and (d) has the capacity to readily download indexes and records stored on the media; (3) have facilities for immediately and easily readable projection or production of electronically stored records; (4) be ready to immediately provide a facsimile enlargement of a record stored on the media; (5) organize and index accurately information stored on the media; (6) have in place an audit system providing accountability regarding the inputting of records to the media and making any changes to those records; (7) be ready to produce the information necessary to access the records; and (8) engage a third party who has access to and the ability to download the records and that executes written undertakings to do so upon the request of the Commission or other securities regulators.

As to optical disks, firms can meet the WORM requirement by “burning” data onto the disk, with the result that it cannot be altered, over-written, or erased, which means that this form of storage media cannot be reused.

After the adoption of the WORM requirement, broker-dealers inquired about whether electronic storage recordkeeping systems that do not permanently “burn” records onto the storage media could meet the WORM requirement. Consequently, in 2003, the Commission issued an interpretation to clarify that the rule does not mandate the use of optical disks and, therefore, a broker-dealer can use “an electronic storage system that prevents the overwriting, erasing or otherwise altering of a record during its required retention period through the use of integrated hardware and software codes” (“Rule 17a-4(f) Interpretation”).¹³ The Rule 17a-4(f) Interpretation noted that electronic recordkeeping systems then in use employed integrated hardware and software codes that prevent the alteration, overwriting, or erasure of records during their required retention periods, and that the codes could not be turned off to remove this feature.¹⁴ Therefore, while the hardware storage medium used by these systems (*i.e.*, magnetic disk) is inherently re-writable, the integrated codes intrinsic to the system prevent the records from

being altered, over-written, or erased during the record’s required retention period.¹⁵ The Rule 17a-4(f) Interpretation clarified that broker-dealers need not rely on a hardware solution to meet the WORM requirement (*e.g.*, the burning of data onto an optical disk) but rather could rely on a solution that prevents records from being altered, over-written, or erased during their required retention period under Rule 17a-4 (*e.g.*, three or six years).¹⁶ The Commission stated that its Rule 17a-4(f) Interpretation did not include electronic recordkeeping systems that mitigate the risk that records will be altered, over-written, or erased, but do not prevent alteration, over-writing, or erasure of the records.¹⁷

In the release adopting Rule 18a-6, the Commission further refined its interpretation of the WORM requirement of Rule 17a-4(f).¹⁸ In particular, the Rule 17a-4 Interpretation provided that the WORM requirement does not mandate a hardware solution (*i.e.*, permanently “burning” records onto an optical disk). However, because the Rule 17a-4 Interpretation described a process of integrated *software and hardware* codes, broker-dealers questioned whether they could use a system that relied solely on software codes to meet the WORM requirement. The Commission clarified that “a software solution that prevents the overwriting, erasing, or otherwise altering of a record during its required retention period would meet the requirements of the rule.”¹⁹

In 2017, a group of trade associations filed a petition for rulemaking with the Commission.²⁰ The petition requested that the Commission replace the WORM requirement with more liberal “principle-based requirements” similar to amendments the Commodity Futures Trading Commission (“CFTC”) had made to its electronic recordkeeping

rule.²¹ The Commission has carefully considered prior comments it received relating to broker-dealer electronic recordkeeping. As discussed below, the Commission is proposing to add an alternative to the WORM requirement that would require a broker-dealer’s electronic recordkeeping system to preserve electronic records in a manner that permits the recreation of an original record if it is altered, over-written, or erased. While this proposal would not rely on “principle-based requirements” to protect the reliability and authenticity of electronic records, it is designed to address concerns raised by commenters about the WORM requirement.²²

2. Rule 18a-6(e)

In 2019, the Commission adopted Exchange Act Rules 18a-5 (“Rule 18a-5”)²³ and 18a-6 to establish recordkeeping requirements for SBS Entities. These rules were modeled on Rules 17a-3 and 17a-4, respectively.²⁴ The electronic preservation requirements of Rule 18a-6 are set forth in paragraph (e) of the rule (“Rule 18a-6(e)”). Rule 18a-6(e) was modeled on Rule 17a-4(f).²⁵ As proposed, Rule 18a-6(e) would have included the WORM requirement.²⁶ However, commenters requested that the Commission not mandate that electronic records be preserved exclusively in a WORM format and not expand the WORM requirement to SBS Entities at that time.²⁷ Commenters also requested that the Commission act on the Rule 17a-4(f) Rulemaking Petition.²⁸ The Commission ultimately did not include the WORM requirement or any similar requirement when adopting Rule 18a-6(e). The Commission stated that “any change to the [WORM requirement] should be addressed in a separate regulatory initiative in which the Commission intends to consider electronic storage

¹³ *Id.*

¹⁴ *Id.* at 25282–83.

¹⁵ *See id.* The Commission identified mitigating factors such as limiting access to the records as being insufficient on their own.

¹⁶ *See* SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68568.

¹⁷ *Id.*

¹⁸ *See* Petition 4-713 (Nov. 14, 2017) filed by the Securities Industry Financial Markets Association, Financial Services Roundtable, Futures Industry Association, International Swaps Derivatives Association, and Financial Services Institute available at <https://www.sec.gov/rules/petitions/2017/petn4-713.pdf> (“Rule 17a-4(f) Rulemaking Petition”). An addendum to the Rule 17a-4(f) Rulemaking Petition was filed on May 24, 2018, available at <https://www.sec.gov/rules/petitions/2018/ptn4-713-addendum.pdf> (“Rule 17a-4(f) Rulemaking Petition Addendum”). Comments on the petition were received and are available at <https://www.sec.gov/comments/4-713/4-713.htm>.

²¹ *See* CFTC, *Recordkeeping*, 82 FR 24479 (May 30, 2017) (“CFTC Electronic Recordkeeping Release”).

²² *See* section II.D. of this release (discussing how this proposed alternative is designed to address concerns raised about the WORM requirement).

²³ 17 CFR 240.18a-5.

²⁴ *See* SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68552–71.

²⁵ *See id.* at 68567–69.

²⁶ *See Recordkeeping and Reporting Requirements for Security-Based Swap Dealers, Major Security-Based Swap Participants, and Broker-Dealers; Capital Rule for Certain Security-Based Swap Dealers*, Exchange Act Release No. 71958 (Apr. 17, 2014), 79 FR 25194, 25219, 25312 (May 2, 2014) (“SBS/MSBSP Recordkeeping Proposing Release”).

²⁷ *See* SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68568.

²⁸ *Id.*

¹³ *See Electronic Storage of Broker-Dealer Records*, Exchange Act Release No. 47806 (May 7, 2003), 68 FR 25281, 25282 (May 12, 2003).

¹⁴ Rule 17a-4(f) Interpretation, 68 FR at 25282.

media issues.”²⁹ Further, the Commission recognized that SBS Entities may have existing recordkeeping systems that did not meet the WORM requirement and, therefore, could incur substantial costs building a recordkeeping system that meets the requirement.³⁰ For these reasons, Rule 18a-6(e) does not include the WORM requirement or the requirement to provide notice before employing an electronic storage system, including a 90-day notice before employing an electronic storage system that does not use optical disk technology.³¹ Rule 18a-6(e) also does not include provisions of Rule 17a-4(f) that are tailored for the WORM requirement (particularly to the use of optical disk technology to meet the requirement).³²

In addition to these differences from Rule 17a-4(f), Rule 18a-6(e) does not include the requirement that the firm engage a third party who has the ability to access the records and who undertakes to do so at the request of the Commission. The Commission cited comments stating that this requirement “needlessly exposes firms to data leakage and cybersecurity threats.”³³

In this rulemaking, the Commission is considering electronic recordkeeping systems of broker-dealers and, therefore, believes it is appropriate to also consider electronic recordkeeping systems of SBS Entities. As discussed below, the Commission is proposing amendments to Rule 18a-6(e) that largely would align with the requirements of Rule 17a-4(f), as proposed to be amended.

C. Current Prompt Production of Records Requirements

Paragraph (j) of Rule 17a-4 (“Rule 17a-4(j)”) requires broker-dealers to furnish promptly to the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 17a-4 or any other record of the firm that is subject to examination under Section 17(b) of the Exchange Act.³⁴ Paragraph (g) of Rule 18a-6 (“Rule 18a-

6(g)”) requires SBS Entities to furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 18a-6, or any other records of the firm subject to examination or required to be made or maintained pursuant to Section 15F of the Exchange Act.³⁵

II. Proposed Amendments

A. Introductory Text

The introductory text of Rule 17a-4(f) provides, in pertinent part, that the records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4 may be immediately produced or reproduced on “micrographic media” or by means of “electronic storage media” that meet the conditions set forth in the rule and be maintained and preserved for the required time in that form. The term “micrographic media” refers to microfilm, microfiche, or any similar medium.³⁶

The introductory text of Rule 18a-6(e) provides, in pertinent part, that the records required to be maintained and preserved pursuant to Rules 18a-5 and 18a-6 may be immediately produced or reproduced by means of an electronic storage system that meets the conditions set forth in the rule and be maintained and preserved for the required time in that form. This text diverges from Rule 17a-4(f) in two material respects. First, it does not refer to “micrographic media.” When proposing Rule 18a-6(e), the Commission expressed a preliminary belief that SBS Entities would not use micrographic media because electronic storage media is more technologically advanced and offers greater flexibility in managing records.³⁷ The Commission also expressed a preliminary belief that most broker-dealers use electronic storage media rather than micrographic media for the same reasons.³⁸ The Commission reiterated these beliefs when adopting Rule 18a-6(e) and, consequently, that rule does not include a micrographic media option for preserving records.³⁹

The second way in which the introductory text of Rule 18a-6(e) diverges from Rule 17a-4(f) in a material way is that the former refers to an electronic storage *system* rather than electronic storage *media*. As proposed, Rule 18a-6(e) would have used the term “electronic storage media.”⁴⁰ However, when adopting Rule 18a-6(e), the Commission explained that the phrase “electronic storage media” was replaced with the phrase “electronic storage system” throughout the rule to clarify that the final rule does not require the use of a particular storage medium such as optical disk or CD-ROM.⁴¹

The Commission is proposing amendments to the introductory text of Rule 17a-4(f) to make the rule more technology neutral. In particular, the phrase “electronic storage media” would be replaced with the phrase “electronic recordkeeping system” throughout the rule, including in the introductory text. The Commission is proposing a conforming amendment to Rule 18a-6(e) to replace the phrase “electronic storage system” with the phrase “electronic recordkeeping system” throughout the rule, including in the introductory text. The Commission preliminarily believes that the phrase “electronic recordkeeping system” better characterizes a system that produces and preserves records electronically. The term “electronic storage media” generally refers to the devices (hardware) used to store data (e.g., floppy disks, optical disks, universal serial bus (USB) drives, and magnetic disks). The Commission believes “electronic recordkeeping system” is a more accurate term because it would encompass both the hardware and software used to store records electronically. Consistent with this proposal, the amendments to Rule 18a-6(e) would replace the term “electronic storage system” throughout the rule with the term “electronic recordkeeping system,” including in the introductory text. In addition, the Commission is proposing amendments to the introductory text of Rules 17a-4(f) and 18a-6(e) solely to improve clarity and readability, but that otherwise are not intended to alter the meaning of either introductory text.⁴²

⁴⁰ See SBS/MSBSP Recordkeeping Adopting Release, 79 FR at 25312.

⁴¹ See SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68550.

⁴² The proposed amendments to Rule 17a-4(f) would replace the current introductory text that reads “(f) The records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 may be immediately produced or reproduced on “micrographic media” (as defined in this section) or by means of “electronic storage

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² See SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68568-69.

³³ *Id.* at 68569.

³⁴ Section 17(b) of the Exchange Act provides, in pertinent part, that all records of a broker-dealer are subject at any time, or from time to time, to such reasonable periodic, special, or other examinations by representatives of the Commission and the appropriate regulatory agency for such persons as the Commission or the appropriate regulatory agency for such persons deems necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Exchange Act. See 15 U.S.C. 78q(b).

³⁵ Section 15F(f)(1) of the Exchange Act provides, in pertinent part, that SBS/MSBSPs shall keep books and records required by Commission rule open to inspection and examination by any representative of the Commission. See 15 U.S.C. 78o-10(f)(1).

³⁶ See paragraph (f)(1)(i) of Rule 17a-4 (defining the term “micrographic media”).

³⁷ See SBS/MSBSP Recordkeeping Adopting Release, 79 FR at 25219.

³⁸ *Id.* at 25219, n.378.

³⁹ See SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68550. As discussed below, Rule 17a-4(f), as proposed to be amended, would retain provisions governing the use of micrographic media but move them to a new paragraph (f)(4) of the rule.

B. Definition of Electronic Recordkeeping System

Paragraphs (f)(1)(i) and (ii) of Rule 17a-4 currently define the terms “micrographic media” and “electronic storage media,” respectively. Paragraph (e)(1) of Rule 18a-6 defines the term “electronic storage system.” Paragraph (f)(1)(ii) of Rule 17a-4 defines the term “electronic storage media” as, in pertinent part, any digital storage medium or system that meets the requirements of the rule. Paragraph (e)(1) of Rule 18a-6 defines the term “electronic storage system” as, in pertinent part, any digital storage system that meets the requirements of the rule. As discussed above, the Commission is proposing to use the term “electronic recordkeeping system” in Rules 17a-4(f) and 18a-6(e). Consequently, the Commission is proposing to define the term “electronic recordkeeping system” in both rules as “a system that preserves records in a digital format and that requires a computer to access the records.”⁴³ The Commission preliminarily believes this definition better describes a system that produces and preserves records electronically.⁴⁴ For these reasons, the proposed amendments to Rules 17a-4(f) and 18a-6(e) would replace the definitions of “electronic storage media” and “electronic storage system” in those rules, respectively, with this

media” (as defined in this section) that meet the conditions set forth in this section and be maintained and preserved for the required time in that form” with text that reads “(f) The records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 may be immediately produced or reproduced by means of an electronic recordkeeping system or by means of micrographic media subject to the conditions set forth in this paragraph and be maintained and preserved for the required time in that form.” The proposed amendments to Rule 18a-6(e) would replace the current introductory text that reads “(e) The records required to be maintained and preserved pursuant to §§ 240.18a-5 and 240.18a-6 may be immediately produced or reproduced by means of an electronic storage system (as defined in this paragraph (e)) that meets the conditions set forth in this paragraph (e) and be maintained and preserved for the required time in that form” with text that reads “(e) The records required to be maintained and preserved pursuant to §§ 240.18a-5 and 240.18a-6 may be immediately produced or reproduced by means of an electronic recordkeeping system subject to the conditions set forth in this paragraph and be maintained and preserved for the required time in that form.”

⁴³ See paragraph (f)(1)(ii) of Rule 17a-4 and paragraph (e)(1) of Rule 18a-6, as proposed to be amended.

⁴⁴ See 36 CFR 1220.18 (regulation of the U.S. National Archives and Records Administration defining “electronic record,” in pertinent part, as “any information that is recorded in a form that only a computer can process” and defining “recordkeeping system” as a “a manual or electronic system that captures, organizes, and categorizes records to facilitate their preservation, retrieval, use, and disposition”).

definition of “electronic recordkeeping system.”

C. Elimination of Notice and Representation Requirements From Rule 17a-4(f)

Paragraph (f)(2)(i) of Rule 17a-4 requires a broker-dealer to notify its DEA prior to employing electronic storage media, including a 90-day notice if the broker-dealer intends to employ electronic storage media other than optical disk technology. Paragraph (f)(2)(i) also requires a representation from the broker-dealer or the storage medium vendor or another third party with appropriate expertise that the selected electronic storage medium meets the conditions set forth in paragraph (f)(2)(ii), which are discussed below.

The Commission is proposing to eliminate these notification and representation requirements from Rule 17a-4(f). The Commission preliminarily believes they are no longer necessary. They were adopted at a time when the use of electronic recordkeeping systems by broker-dealers to meet the record preservation requirements of Rule 17a-4 was a relatively new phenomenon.⁴⁵ The requirements alerted the broker-dealer’s DEA of the firm’s intent to use electronic storage media to meet the record preservation requirements of Rule 17a-4. Given that the Commission and broker-dealer DEAs now have over 25 years of experience with broker-dealers using electronic recordkeeping systems, these requirements may no longer serve a useful purpose. As noted above, the Commission did not include analogous requirements in Rule 18a-6(e).

D. Requirements for Electronic Recordkeeping Systems

Paragraphs (f)(2)(ii)(A) through (D) of Rule 17a-4 set forth technical requirements for electronic storage media if used by a broker-dealer to meet the record preservation requirements of Rule 17a-4. Similarly, paragraphs (e)(2)(i) through (iii) of Rule 18a-6 set forth technical requirements for an electronic storage system if used by an SBS Entity to meet the record preservation requirements of Rule 18a-6. As discussed below, the Commission is proposing amendments to these requirements.⁴⁶

⁴⁵ As discussed above, Rule 17a-4(f) was adopted in 1997.

⁴⁶ In addition to the proposed amendments discussed below, the Commission is proposing to simplify the introductory text of paragraphs (f)(2) and (e)(2) of Rules 17a-4 and 18a-6, respectively. In particular, the introductory text of paragraph (f)(2) of Rule 17a-4 (which provides that “If

As a preliminary matter, the requirements for electronic recordkeeping systems in Rule 17a-4(f) would apply to all broker-dealers. However, the Commission is proposing to limit the application of the requirements for electronic recordkeeping systems in paragraph (e)(2) of Rule 18a-6 to nonbank SBS Entities, that is, SBS Entities *without a prudential regulator*. SBS Entities *with a prudential regulator* (“bank SBS Entities”) would therefore not be subject to the requirements of paragraph (e)(2) of Rule 18a-6, as proposed to be amended.⁴⁷ Unlike nonbank SBS Entities, bank SBS Entities are subject to oversight and supervision by the banking agencies with respect to record preservation. This oversight and supervision may now or in the future include regulations or guidance with respect to requirements for electronic recordkeeping systems that differ from the proposed requirements for electronic recordkeeping systems

electronic storage media is used by a member, broker, or dealer, it must comply with the following requirements:”) and paragraph (f)(2)(ii) of Rule 17a-4 (which provides that “The electronic storage media must:”) would be simplified to a single introductory text for paragraph (f)(2) providing that “An electronic recordkeeping system must:”). The introductory text of paragraph (e)(2) of Rule 18a-6 (providing that “If an electronic storage system is used by a security-based swap dealer or major security-based swap participant, it must:”) would be modified to provide that “An electronic recordkeeping system of a security-based swap dealer or major security-based swap participant without a prudential regulator must:”. The amendments to paragraph (f)(2) of Rule 17a-4 would result in the following numbering changes: (1) The new audit-trail requirement would be set forth in paragraph (f)(2)(i)(A) of Rule 17a-4, as proposed to be amended; (2) the existing WORM requirement of paragraph (f)(2)(ii)(A) of Rule 17a-4 would be set forth in paragraph (f)(2)(i)(B) of Rule 17a-4, as proposed to be amended; (3) the amended requirement of paragraph (f)(2)(ii)(B) of Rule 17a-4 would be set forth in paragraph (f)(2)(ii) of Rule 17a-4, as proposed to be amended; (4) the amended requirement of paragraph (f)(2)(ii)(C) of Rule 17a-4 would be set forth in paragraph (f)(2)(iii) of Rule 17a-4, as proposed to be amended; and (5) the amended requirement of paragraph (f)(2)(ii)(D) of Rule 17a-4 would be set forth in paragraph (f)(2)(iv) of Rule 17a-4, as proposed to be amended. The amendments to paragraph (e)(2) of Rule 18a-6 would result in the following numbering changes: (1) The new audit-trail and WORM alternative requirements would be set forth in paragraphs (e)(2)(i)(A) and (B), respectively, of Rule 18a-6, as proposed to be amended; (2) the amended requirement of paragraph (e)(2)(i) of Rule 18a-6 would be set forth in paragraph (e)(2)(ii) of Rule 18a-6, as proposed to be amended; (3) the amended requirement of paragraph (e)(2)(ii) of Rule 18a-6 would be set forth in paragraph (e)(2)(iii) of Rule 18a-6, as proposed to be amended; and (4) the amended requirement of paragraph (e)(2)(iii) of Rule 18a-6 would be set forth in paragraph (e)(2)(iv) of Rule 18a-6, as proposed to be amended.

⁴⁷ See the introductory text to paragraph (e)(2) of Rule 18a-6, as proposed to be amended (limiting the paragraph’s requirements to an SBS Entity without a prudential regulator).

discussed below.⁴⁸ In particular, the proposal to amend the requirements for electronic recordkeeping systems in paragraph (e)(2) of Rule 18a–6 to add the audit-trail and WORM alternative requirements could impose requirements that conflict with regulations or guidance of the prudential regulators. Further, the recordkeeping requirements of Rules 18a–5 and 18a–6 applicable to bank SBS Entities are more limited in scope because: (1) The Commission’s authority under Section 15F(f)(1)(B)(i) of the Exchange Act is tied to activities related to the conduct of the firm’s business as an SBS Entity; (2) bank SBS Entities are subject to recordkeeping requirements applicable to banks with respect to their banking activities; and (3) the prudential regulators—rather than the Commission—are responsible for capital, margin, and other prudential requirements applicable to bank SBS Entities.⁴⁹ For these reasons, the Commission preliminarily believes that it would be appropriate to not impose the requirements for electronic recordkeeping systems in paragraph (e)(2) of Rule 18a–6, as proposed to be amended, on bank SBS Entities, but continue to impose them, as proposed to be amended, on nonbank SBS Entities.

Paragraph (f)(2)(ii)(A) of Rule 17a–4 sets forth the WORM requirement. The Commission is proposing to amend Rule 17a–4(f) to add an audit-trail alternative to the WORM requirement for broker-dealers.⁵⁰ In addition, the Commission is proposing to amend Rule 18a–6(e) to require that the electronic recordkeeping systems of nonbank SBS Entities must meet either the audit-trail requirement or the WORM requirement.⁵¹ Unlike bank SBS Entities, the Commission is responsible for promulgating capital and margin requirements for nonbank SBS Entities and overseeing their compliance with

those requirements.⁵² Given this broader regulatory responsibility over nonbank SBS Entities, the Commission preliminarily believes it would be appropriate to amend the existing requirements for electronic recordkeeping systems in Rule 18a–6(e) to add the requirement that the systems must meet either the audit-trail or WORM requirement. As discussed below, a WORM-compliant electronic recordkeeping system may be preferable for certain types of records. Moreover, including this alternative in the proposed amendments to Rule 18a–6(e) would provide nonbank SBS Entities the same two alternatives that broker-dealers would have under the proposed amendments to Rule 17a–4(f).

Under the proposed amendments to Rule 17a–4(f), broker-dealers would have an option to employ electronic recordkeeping systems that meet the audit-trail requirement as an alternative to the existing WORM requirement (which requirement would be retained in the rule). Under the proposed amendments to Rule 18a–6(e), nonbank SBS Entities would need to employ electronic recordkeeping systems that meet either the proposed audit-trail requirement or the proposed WORM requirement. Broker-dealers and nonbank SBS Entities would have the flexibility to preserve all of their electronic records either by (1) consistently using an electronic recordkeeping system that meets *either* the audit-trail requirement *or* the WORM requirement or (2) preserving some electronic records using an electronic recordkeeping system that meets the audit-trail requirement and preserving other electronic records using an electronic recordkeeping system that meets the WORM requirement.⁵³ In the case of both rules, the object of the proposal is to require broker-dealers and nonbank SBS Entities to preserve electronic records in a manner that permits original records to be re-created if altered, over-written, or erased, or that prevents original records from being altered, over-written, or erased. The objective is to require

these registrants to maintain and preserve electronic records in a manner that protects the authenticity and reliability of original records.

The audit-trail alternative would be designed to address concerns that the WORM requirement causes some firms to deploy an electronic recordkeeping system that serves no purpose other than to hold records in a manner that meets the Commission’s regulatory requirements for electronic recordkeeping systems.⁵⁴ In particular, following the publication of the Rule 17a–4(f) Interpretation, third-party vendors developed software-based solutions designed to meet the WORM requirement of Rule 17a–4(f). Some broker-dealers use these electronic storage solutions to meet the WORM requirement. However, the records stored on these electronic recordkeeping systems are often retained in that particular format solely for the purpose of meeting the WORM requirement (*i.e.*, they are not the records and associated electronic recordkeeping systems the firms use for business purposes). Broker-dealers have explained to Commission staff that the electronic recordkeeping systems used for business purposes are dynamic and updated constantly (*e.g.*, with each new transaction or position) and easily accessible for retrieving records; whereas the WORM-compliant electronic recordkeeping systems are more akin to static “snapshots” of the records at a point in time and less accessible.⁵⁵ As a result, some broker-dealers currently use WORM-compliant electronic recordkeeping systems solely to meet the requirements of Rule 17a–4(f). Broker-dealers retrieve records from their business-based electronic recordkeeping systems for their own purposes. In addition, the Commission understands that firms generally retrieve and produce records from their business-based electronic recordkeeping systems rather than from their WORM-compliant electronic recordkeeping systems in response to requests from securities regulators because these records are easier to retrieve. Commission staff typically do not specifically request that records be produced from the WORM-compliant

⁴⁸ Unlike Rules 17a–3 and 17a–4 which consolidate broker-dealer recordkeeping requirements, the recordkeeping requirements for banks are diffuse. *See, e.g.*, 31 CFR 1020.410 (recordkeeping requirements under the Bank Secrecy Act regarding funds transfers equal to or greater than \$3,000); 12 CFR 9.8 (recordkeeping requirements regarding fiduciary accounts); 12 CFR 12.3 (recordkeeping requirements for securities transactions); 12 CFR 25.42 (recordkeeping requirements for small business and farm loans, including requirement to maintain the information in machine readable form).

⁴⁹ *See* SBSB/MSBSP Recordkeeping Adopting Release, 84 FR at 68552.

⁵⁰ *See* paragraph (f)(2)(i)(A) of Rule 17a–4, as proposed to be amended. As discussed above, the existing WORM requirement of Rule 17a–4 would be set forth in paragraph (f)(2)(i)(B) of Rule 17a–4, as proposed to be amended.

⁵¹ *See* paragraph (e)(2)(i)(B) of Rule 18a–6, as proposed to be amended.

⁵² *See* 15 U.S.C. 78o–10(e)(1)(B). *See also* *Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap Participants and Capital and Segregation Requirements for Broker-Dealers*, Exchange Act Release No. 86175 (Jun. 21, 2019), 84 FR 43872 (Aug. 22, 2019) (“SBSB/MSBSP Capital, Margin, and Segregation Adopting Release”) (Commission release adopting capital and margin requirements for nonbank SBS Entities).

⁵³ As discussed in more detail below, broker-dealers and nonbank SBS Entities could for business reasons elect to use two recordkeeping systems if the proposals are adopted: One that complies with the audit-trail requirement and one that complies with the WORM requirement.

⁵⁴ *See* Rule 17a–4(f) Rulemaking Petition at 4 (“Today, WORM systems are costly, outmoded, and inefficient storage containers used exclusively to meet the rule’s requirements.”).

⁵⁵ *See* Rule 17a–4(f) Rulemaking Petition at 4 (“Data stored in WORM is essentially a static snapshot of a record that is locked and secured from any manipulation or deletion, as opposed to a complete system that could be used to stand up a production system during or following a disaster event.”).

recordkeeping system.⁵⁶ The exception would be a case where alteration is suspected. In that case, the staff would request records from the WORM-compliant electronic recordkeeping system.

For these reasons, the Commission is proposing to amend Rule 17a-4(f) to provide an audit-trail alternative to the WORM requirement. In addition, the Commission is proposing to require nonbank SBS Entities to use electronic recordkeeping systems that meet either the audit-trail or WORM requirement. Under the audit-trail alternative, the electronic recordkeeping system would need to preserve the records for the duration of their applicable retention periods in a manner that maintains a complete time-stamped audit trail that includes: (1) All modifications to and deletions of a record or any part thereof; (2) the date and time of operator entries and actions that create, modify, or delete the record; (3) the individual(s) creating, modifying, or deleting the record; and (4) any other information needed to maintain an audit trail of each distinct record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record and interim iterations of the record.⁵⁷ The objective of the proposed audit-trail alternative is to require the electronic recordkeeping system to be configured so that an original record that is altered, over-written, or erased can be re-created for the retention period applicable to the original record. This would be an alternative to the WORM requirement, which prevents an original record from being altered, over-written, or erased for its required retention period.

It is the Commission's understanding that electronic recordkeeping systems used by certain broker-dealers and nonbank SBS Entities for business purposes can be configured to meet the audit-trail requirement. Therefore, this

⁵⁶ See also Rule 17a-4(f) Rulemaking Petition at 5 (“[O]ur members report that regulators (including SEC and FINRA examiners and enforcement staff) do not typically ask for production of records from WORM storage because the information or data is not readily sortable or searchable. Regulators instead request customized extracts or views of data collected from active storage systems where the record was originally created, that has not yet been transferred to a WORM system.”).

⁵⁷ See, e.g., 21 CFR 11.10 (regulation of the U.S. Food and Drug Administration setting forth requirements for persons who used closed systems to create, modify, maintain, or transmit electronic records and requiring, among other things, the use of time-stamped audit trails to independently record the date and time of operator entries and actions that create, modify, or delete electronic records and that record changes shall not obscure previously recorded information).

amendment along with the others proposed in the release are designed to facilitate the use of a single electronic recordkeeping system for business and regulatory purposes.

Under the proposed amendments, broker-dealers could potentially continue to use the electronic recordkeeping systems they currently employ to meet the WORM requirement. Similarly, nonbank SBS Entities would have the option to use electronic recordkeeping systems that meet the WORM requirement (as an alternative to the audit-trail requirement).⁵⁸ For example, WORM-compliant electronic recordkeeping systems may be appropriate for storing certain types of records such as emails (as compared to transaction and ledger account data that is updated continuously).⁵⁹ Moreover, some broker-dealers may choose to use their existing WORM-compliant electronic recordkeeping systems rather than adopt a new technology. Further, some broker-dealers may choose to retain existing electronic records on a legacy WORM-compliant electronic recordkeeping system, including software-based systems that are designed to follow the Rule 17a-4(f) Interpretation rather than transfer them to an electronic recordkeeping system that would meet the proposed audit-trail requirement. However, these firms could decide to preserve new records on an electronic recordkeeping system that would meet the proposed audit-trail requirement.

Paragraph (f)(2)(ii)(B) of Rule 17a-4 requires electronic storage media used by a broker-dealer to verify automatically the quality and accuracy of the storage media recording process. Similarly, paragraph (e)(2)(i) of Rule 18a-6 requires an electronic storage system used by an SBS Entity to verify automatically the quality and accuracy of the electronic storage system recording process. The Commission is proposing to amend the requirements set forth in these two paragraphs. The

⁵⁸ The Commission would interpret the WORM requirement as set forth in the text of paragraph (e)(2)(i)(B) of Rule 18a-6, as proposed to be amended, consistently with how the WORM requirement as set forth in the text of paragraph (f)(2)(ii)(A) of Rule 17a-4 was interpreted by the Commission in 2019 and 2003. See SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68568; Rule 17a-4(f) Interpretation, 68 FR 25281.

⁵⁹ See Rule 17a-4(f) Rulemaking Petition at 4 (“Although storing electronic communications data—like email and instant messaging, or common unstructured file types such as PDF—in WORM format has become standardized, dynamic content generated by complex trading and risk systems, emerging communications platforms, as well as records created by aggregating information from various systems, cannot be easily stored in WORM format.”).

amendments would require that the electronic recordkeeping system used by a broker-dealer or nonbank SBS Entity must verify automatically the completeness and accuracy of the processes for storing and retaining records electronically.⁶⁰ The proposed new text is intended to specify that the requirement is designed to ensure that when an original record is added to the electronic recordkeeping system it is completely and accurately captured in the system.⁶¹

Paragraph (f)(2)(ii)(C) of Rule 17a-4 requires electronic storage media used by a broker-dealer to serialize the original and, if applicable, duplicate units of storage media, and time-date for the required period of retention the information placed on such electronic storage media. Paragraph (e)(2)(ii) of Rule 18a-6 requires an electronic storage system used by an SBS Entity, *if applicable*, to serialize the original and duplicate units of the storage media, and time-date for the required period of retention the information placed in such electronic storage system. Consequently, Rule 18a-6(e) imposes the requirement on an SBS Entity only if serializing and time-dating storage media is applicable. The Commission explained this difference between Rule 17a-4(f) and Rule 18a-6(e) by stating that serialization and time-dating is required when a firm uses optical disks to meet the WORM requirement.⁶² As discussed above, the Commission is proposing amendments to Rules 17a-4(f) and 18a-6(e) that would provide firms with the option of using electronic recordkeeping systems that meet either the audit-trail requirement or the WORM requirement. Moreover, as discussed above, the Rule 17a-4(f) Interpretation, which is extant, clarifies that Rule 17a-4(f) does not mandate the use of optical disk to meet the WORM requirement.⁶³ Under the proposed amendments to Rules 17a-4(f)

⁶⁰ See paragraph (f)(2)(ii) of Rule 17a-4 and paragraph (e)(2)(ii) of Rule 18a-6, as proposed to be amended.

⁶¹ In this regard, the proposed text would replace the text in Rules 17a-4(f) and 18a-6(e) that reads “Verify automatically the quality and accuracy of the electronic storage system recording process” with the phrase “Verify automatically the completeness and accuracy of the processes for storing and retaining records electronically.” See paragraph (f)(2)(ii) of Rule 17a-4 and paragraph (e)(2)(ii) of Rule 18a-6, as proposed to be amended.

⁶² See SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68568.

⁶³ See Rule 17a-4(f) Interpretation. The Commission would interpret the rule text in Rule 18a-6(e), as proposed to be amended, consistently with the Rule 17a-4(f) Interpretation of the WORM requirement and the 2019 interpretation of the WORM requirement. See Rule 17a-4(f) Interpretation, 68 FR 25281; SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68568.

and 18a–6(e), the serialization and time-stamping requirements would apply only if the firm uses optical disks as the storage media to meet the WORM requirement. For this reason, the Commission is proposing to amend Rule 17a–4(f) to provide that the requirement is triggered *if applicable*.⁶⁴

Paragraph (f)(2)(ii)(D) of Rule 17a–4 requires electronic storage media used by a broker-dealer to have the capacity to readily download indexes and records preserved on the electronic storage media to any medium acceptable under Rule 17a–4 as required by the Commission or the self-regulatory organizations (“SROs”) of which the broker-dealer is a member. Paragraph (e)(2)(iii) of Rule 18a–6 requires an electronic storage system used by an SBS Entity to have the capacity to readily download into a readable format indexes and records preserved in the electronic storage system. Indexes organize records and are a means for locating specific records within a recordkeeping system. However, electronic recordkeeping systems may use other means to organize and locate records.

The Commission is proposing to amend the text of these two requirements to incorporate the information that would be stored under the proposed audit-trail requirement and to specify that the electronic recordkeeping system must have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format.⁶⁵ A human readable format would be a format that can be naturally read by an individual. A reasonably usable electronic format would be a format that is common and compatible with commonly used systems for accessing and reading electronic records. This proposed requirement is designed to address an electronic recordkeeping system that stores records in a proprietary file format that cannot be accessed or read by commonly used systems. In this case, producing the records in their native file

format would be meaningless since they could not be accessed or read by securities regulators.⁶⁶ Moreover, depending on the nature and volume of the requested records, producing them in a human readable format may hinder or delay an examination or investigation because it would take more time to search the records for relevant information; whereas electronic records can be searched and sorted using a computer. Conversely, in some cases, it may be more efficient to produce a record in a human readable format; for example, if an examiner is on site and requests a specific record. For these reasons, the proposed amendments would require that the electronic recordkeeping system have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format.

Further, rather than refer to the capacity to download *indexes*, the proposed requirements would require the capacity to download and transfer information needed to locate specific electronic records. In particular, the proposed amendments would require the electronic recordkeeping system to have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format *and to download and transfer the information needed to locate the electronic record*.⁶⁷ The requirement to

download and transfer audit trails would apply only if the firm’s electronic recordkeeping system uses the audit-trail alternative. The more general reference to “information needed to locate the electronic record” would be designed to incorporate whatever means a particular electronic recordkeeping systems uses to organize the records and locate a specific record (*e.g.*, indexes or data fields).

E. Requirements for Broker-Dealers and SBS Entities Using Electronic Recordkeeping Systems

Paragraph (f)(3) of Rule 17a–4 and paragraph (e)(3) of Rule 18a–6 impose obligations on broker-dealers and SBS Entities, respectively, related to their use of electronic recordkeeping systems. In general, these requirements are designed to ensure that the staffs of the Commission and other relevant securities regulators can access and examine the records. As discussed below, the Commission is proposing amendments to these requirements. Under the proposed amendments, prudentially regulated SBS Entities would no longer be subject to the requirements of paragraph (e)(2) of Rule 18a–6. Prudentially regulated SBS Entities would, however, continue to be subject to the requirements of paragraph (e)(3) of the rule. Paragraph (e)(3) of Rule 18a–6 does not impose technical requirements on the electronic recordkeeping system. Instead, it specifies the requirements for the SBS Entity in connection with its use of an electronic recordkeeping system. As noted above, these requirements generally are designed to ensure that the staffs of the Commission and other relevant regulators can access and examine the records. For these reasons, the Commission preliminarily believes they should continue to apply to bank SBS Entities.

The introductory text of paragraph (f)(3) of Rule 17a–4 provides that if the broker-dealer uses micrographic media or electronic storage media, it must comply with requirements set forth in the paragraph, which are discussed below. Similarly, the introductory text of paragraph (e)(3) of Rule 18a–6 provides that, if an SBS Entity uses an electronic storage system, it must comply with the requirements set forth in the paragraph, which are also discussed below. The Commission is

jurisdiction over the SBS Entity when there is a reference to the staff of the Commission. See paragraphs (e)(2)(iv), (e)(3)(i), (e)(3)(ii), (e)(3)(v)(B), (e)(3)(vi), and (e)(3)(vii) of Rule 18a–6, as proposed to be amended.

⁶⁶ If the native file format used by the firm is compatible with commonly used systems for accessing and reading electronic records, it could be produced in that format.

⁶⁷ See paragraph (f)(2)(iv) of Rule 17a–4 and paragraph (e)(2)(iv) of Rule 18a–6, as proposed to be amended. The current text of Rule 17a–4(f) sometimes prescribes requirements that refer to the staffs of Commission and SROs of which the broker-dealer is a member. See paragraphs (f)(2)(ii)(D), (f)(3)(i), (f)(3)(iv)(A), (f)(3)(v)(A), and (f)(3)(vi) of Rule 17a–4. In other cases, the current text refers to the staffs of Commission, SROs of which the broker-dealer is a member, *and* state securities regulators having jurisdiction over the broker-dealer. See paragraphs (f)(3)(ii) and (vii) of Rule 17a–4. The Commission is proposing to consistently reference the staffs of the Commission, SROs of which the broker-dealer is a member, and state securities regulators having jurisdiction over the broker-dealer. See paragraphs (f)(2)(iv), (f)(3)(i), (f)(3)(ii), (f)(3)(v)(B), (f)(3)(vi), (f)(3)(vii), (f)(4)(i), (f)(4)(ii), and (f)(iv)(A) of Rule 17a–4, as proposed to be amended. The current text of Rule 18a–6(e) sometimes prescribes requirements that refer to the staff of the Commission. See paragraphs (e)(3)(i), (e)(3)(iv)(A), (e)(3)(v)(A), and (e)(3)(vi) of Rule 18a–6. The rule does not refer to the staffs of SROs of which the SBS Entity is a member because SBS Entities will not be members of an SRO. However, SBS Entities may be subject to the jurisdiction of state securities regulators. Consequently, the Commission is proposing to add references to the staffs of state securities regulators having

⁶⁴ See paragraph (f)(2)(iii) of Rule 17a–4 (f) as proposed to be amended. The Commission is proposing amendments to the serialization and time-stamping requirement of paragraph (e)(2) of Rule 18a–6 to further clarify that it is tied to the use of optical disks to meet the WORM requirement. In particular, the phrase “placed in such electronic storage system” would be replaced with the phrase “placed on such electronic storage media.” See paragraph (e)(2)(iii) of Rule 18a–6, as proposed to be amended.

⁶⁵ As discussed in section II.G. of this release, the Commission also is proposing to amend paragraph (j) of Rule 17a–4 and paragraph (g) of Rule 18a–6 to require that an electronic record be produced in a reasonably usable electronic format.

proposing to simplify the introductory text of both paragraphs.⁶⁸

Paragraph (f)(3)(i) of Rule 17a-4 requires a broker-dealer to at all times have available, for examination by Commission or SRO staff, facilities for the immediate, easily readable projection or production of micrographic media or electronic storage media images and for the production of easily readable images. Similarly, paragraph (e)(3)(i) of Rule 18a-6 requires an SBS Entity to at all times have available for examination by Commission staff facilities for the immediate, easily readable projection or production of records or images maintained on an electronic storage system and for the production of easily readable copies of those records or images.

The Commission is proposing amendments to paragraph (f)(3)(i) of Rule 17a-4 that would delete references to micrographic media and replace terms that are tied to micrographic media.⁶⁹ In addition, the proposed amendments to paragraphs (f)(3)(i) of Rule 17a-4 and (e)(3)(i) of Rule 18a-6 are intended to replace terms that are tied to optical disk technology.⁷⁰ The Commission's objective is to set forth new requirements that would require broker-dealers and SBS Entities to have facilities available to produce records to the staffs of the Commission, SROs, and state securities regulators, as applicable, and to read records stored on an *electronic recordkeeping system*.⁷¹

⁶⁸ See introductory text of paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6, as proposed to be amended (providing, respectively, that a broker-dealer or SBS Entity "using an electronic recordkeeping system must"). In addition, the introductory text of paragraph (f)(3) of Rule 17a-4, as proposed to be amended, would not reference "micrographic media," instead, the existing requirements for using micrographic media would be set forth in new paragraph (f)(4) of Rule 17a-4.

⁶⁹ While paragraph (f)(3)(i) of Rule 17a-4, as proposed to be amended, would no longer reference micrographic media, a broker-dealer would continue to be able to use micrographic media to preserve records under the requirements set forth in new paragraph (f)(4) of Rule 17a-4.

⁷⁰ In particular, the amendments to Rule 17a-4 would replace the phrase "electronic storage media images" and the term "images" with the term "record" and the amendments Rules 17a-4 and 18a-6 would remove the term "projection." The amendments to Rule 18a-6 would remove the term "images."

⁷¹ See paragraph (f)(3)(i) of Rule 17a-4, as proposed to be amended (providing that a broker-dealer must "[a]t all times have available, for examination by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker or dealer facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records") and paragraph (e)(3)(i) of

Paragraph (f)(3)(ii) of Rule 17a-4 requires a broker-dealer to be ready at all times to provide, and immediately provide, any facsimile enlargement that the staff of the Commission, an SRO, or state securities regulator may request. Similarly, paragraph (e)(3)(ii) of Rule 18a-6 requires that an SBS Entity be ready at all times to immediately provide in a readable format any record or index stored on the electronic storage system that the staff of the Commission requests.

The Commission is proposing amendments to both of these paragraphs to require the broker-dealer and the SBS Entity to be ready at all times to provide records stored on an electronic recordkeeping system. In particular, the current text of both paragraphs would be replaced with new text requiring the broker-dealer or SBS Entity to be ready at all times to provide immediately any record or information needed to locate records stored by means of the electronic recordkeeping system that the staffs of the Commission, SROs, and state securities regulators, as applicable, may request.⁷²

Paragraph (f)(3)(iii) of Rule 17a-4 requires a broker-dealer to store separately from the original, on any medium acceptable under Rule 17a-4, a duplicate copy of a record for the requisite time period. Similarly, paragraph (e)(3)(iii) of Rule 18a-6 requires that an SBS Entity store separately from the original a duplicate copy of a record stored on the electronic storage system for the requisite time period. These current provisions require broker-dealers and SBS Entities to maintain a second copy of each record.

The Commission is proposing amendments to both of these paragraphs to require the broker-dealer and the SBS Entity to have a backup set of records when records are preserved on an *electronic recordkeeping system*.⁷³

Rule 18a-6, as proposed to be amended (providing that an SBS Entity must "[a]t all times have available, for examination by the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant, facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records").

⁷² See paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6, as proposed to be amended.

⁷³ See paragraph (f)(3)(iii) of Rule 17a-4, as proposed to be amended (providing that a broker-dealer must "[m]aintain a backup electronic recordkeeping system that meets the other requirements of this paragraph (f) and that retains the records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 in accordance with this section") and paragraph (e)(3)(iii) of Rule 18a-6, as proposed to be amended (providing that an SBS Entity must "[m]aintain a backup electronic recordkeeping system that meets

Under the proposal, the broker-dealer or SBS Entity would need to have a second electronic recordkeeping system that preserves a second set of records that can be accessed and examined if the primary electronic recordkeeping system storing the primary set of records is disrupted, malfunctions, or otherwise becomes inaccessible. The second electronic recordkeeping system would serve as a redundant source from which to retrieve records if records cannot be retrieved from the primary recordkeeping system. In addition to facilitating examinations, the backup electronic recordkeeping system would promote the business continuity of the broker-dealer or SBS Entity in the event the primary electronic recordkeeping system is disrupted. This would benefit the firm and protect investors and other securities market participants. The second electronic recordkeeping system would need to meet the requirements of Rules 17a-4(f) and 18a-6(e), except that it would not need a backup recordkeeping system.⁷⁴ The records stored on the backup electronic recordkeeping system would need to be preserved in accordance with record preservation requirements of Rules 17a-4 or 18a-6, as applicable. Among other requirements, this would mean that the second set of records would need to be preserved for their required retention periods.

Paragraph (f)(3)(iv) of Rule 17a-4 requires a broker-dealer to organize and index accurately all information maintained on both original and any duplicate storage media. Paragraph (f)(3)(iv)(A) requires a broker-dealer to have the indexes available at all times for examination by the staffs of the Commission or an SRO. Paragraph (f)(3)(iv)(B) requires that each index be duplicated and the duplicate copies be stored separately from the original copy of the index. Finally, paragraph (f)(3)(iv)(C) requires that the original and duplicate indexes be preserved for the time required for the indexed record. Similarly, paragraph (e)(3)(iv) of Rule 18a-6 requires an SBS Entity to organize and index accurately all information maintained on both original and any duplicate storage system. Paragraph (e)(3)(iv)(A) requires an SBS Entity to have the indexes available at

the other requirements of this paragraph (e) and that retains the records required to be maintained and preserved pursuant to §§ 240.18a-5 and 240.18a-6 in accordance with this section").

⁷⁴ Accordingly, to address this proposed amendment, the text of paragraph (f)(3)(iii) of Rule 17a-4, as proposed to be amended, and paragraph (e)(3)(iii) of Rule 18a-6, as proposed to be amended, refer to the "other" requirements of Rules 17a-4(f) and 18a-6(e), respectively.

all times for examination by the staff of the Commission. Paragraph (e)(3)(iv)(B) requires that each index be duplicated and the duplicate copies be stored separately from the original copy of the index. Finally, paragraph (e)(3)(iv)(C) requires that the original and duplicate indexes be preserved for the time required for the indexed record.

As discussed above, some electronic recordkeeping systems may use means other than indexes to organize and locate records stored on the systems. Further, the references to indexes in Rule 17a-4(f), in part, reflect the widespread use of optical disks to store records electronically when the rule was adopted in 1997. Consequently, the Commission is proposing to amend these paragraphs of Rules 17a-4(f) and 18a-6(e) to impose obligations on broker-dealers and SBS Entities to organize and maintain information necessary to locate records stored on their electronic recordkeeping systems without mandating the use of indexes. Under the amendments, a broker-dealer or SBS Entity using an electronic recordkeeping system would need to organize and maintain information necessary to locate records maintained by the electronic recordkeeping system.⁷⁵

Rule 17a-4(f)(3)(v) requires that the broker-dealer have in place an audit system providing for accountability regarding inputting of records required to be maintained and preserved pursuant to Rules 17a-3 and 17a-4 to electronic storage media and inputting of any changes made to every original and duplicate record maintained and preserved on electronic storage media. Paragraph (f)(3)(v)(A) requires a broker-dealer to have the results of the audit system available at all times for examination by the staffs of the Commission or an SRO. Finally, paragraph (f)(3)(v)(B) requires that the results of the audit be preserved for the time required for the audited records. Similarly, Rule 18a-6(e)(3)(v) requires that the SBS Entity have in place an audit system providing for accountability regarding inputting of records required to be maintained and preserved pursuant to Rules 18a-5 and 18a-6 to the electronic storage system and inputting of any changes made to every original and duplicate record maintained and preserved on the electronic storage system. Paragraph (e)(3)(v)(A) requires an SBS Entity to have the results of the audit system available at all times for examination by

the staff of the Commission. Finally, Paragraph (e)(3)(v)(B) requires that the results of the audit be preserved for the time required for the audited records.

The Commission is proposing amendments to these paragraphs of Rules 17a-4 and 18a-6 that are designed to better clarify the obligations of the broker-dealer or SBS Entity. In particular, the current rules require an “audit system” that provides “accountability” regarding the inputting of records and changes to records to the electronic storage media (in the case of Rule 17a-4) or electronic storage system (in the case of Rule 18a-6).⁷⁶ The proposed amendments would establish specific elements of information relating to electronic records for which the broker-dealer would be required to establish an auditable system of controls. In particular, the Commission is proposing to replace the existing requirement with a requirement that the broker-dealer or SBS Entity have in place an auditable system of controls that records, among other things: (1) Each input, alteration, or deletion of a record; (2) the names of individuals inputting, altering, or deleting a record; and (3) the date and time such individuals input, altered, or deleted the record.⁷⁷ As used in the proposed text, the phrase “auditable system of controls” would mean a system of controls that is documented and can be audited by internal or external examiners to determine whether the controls are operating as would be required by the rule. The objective of these proposed requirements is to identify a uniform set of information relating to electronic records for which the broker-dealer or SBS Entity would have responsibility and that could be used to examine whether the system is operating in conformance with the requirements of the proposed rule (e.g., if the electronic recordkeeping system is using the audit-trail requirement, that it is preserving records in a manner that allows the original record to be re-created if overwritten, erased, or otherwise altered).

The remaining amendments to these paragraphs would be designed to incorporate the concept of a system of controls that tracks this information. In this regard, the broker-dealer or SBS Entity would need to be able to produce a record of the results of the audit of the system of controls for examination by the staffs of the Commission, SROs, and

state securities regulators, as applicable.⁷⁸ This would mean the firm would need to be able to produce a record of: (1) Each input, alteration, or deletion of a record; (2) the names of individuals inputting, altering, or deleting a record; and (3) the date and time such individuals input, altered, or deleted the record. In addition, the broker-dealer or SBS Entity would need to preserve the record of the results of the audit of the system of controls for the retention period required for the associated records.⁷⁹ This would mean the firm would need to preserve the information discussed above for the required retention period of the record.

Paragraph (f)(3)(vi) of Rule 17a-4 requires a broker-dealer to maintain, keep current, and provide promptly upon request by the staffs of the Commission or an SRO all information necessary to access records and indexes stored on the electronic storage media; or place in escrow and keep current a copy of the physical and logical file format of the electronic storage media, the field format of all different information types written on the electronic storage media and the source code, together with the appropriate documentation and information necessary to access records and indexes. Similarly, paragraph (e)(3)(vi) of Rule 18a-6 requires an SBS Entity to maintain, keep current, and provide promptly upon request by the staff of the Commission all information necessary to access records and indexes stored in the electronic storage system; or place in escrow and keep current a copy of the physical and logical file format of the electronic storage system, the field format of all different information types written on the electronic storage system and the source code, together with the appropriate documentation and information necessary to access records and indexes.

The Commission is proposing to eliminate the escrow account option from these paragraphs for two reasons. First, this option is premised upon the use of electronic storage media such as optical disk technology. Second, it could pose cybersecurity risk to have this information held by a third party in escrow. The Commission is proposing to retain the requirement that the broker-dealer or SBS Entity maintain, keep current, and provide promptly upon request by the Commission, SROs, and state securities regulators, as applicable,

⁷⁶ See paragraph (f)(3)(v) of Rule 17a-4 and paragraph (e)(3)(v) of Rule 18a-6.

⁷⁷ See paragraph (f)(3)(v)(A) of Rule 17a-4 and paragraph (e)(3)(v)(A) of Rule 18a-6, as proposed to be amended.

⁷⁸ See paragraph (f)(3)(v)(B) of Rule 17a-4 and paragraph (e)(3)(v)(B) of Rule 18a-6, as proposed to be amended.

⁷⁹ See paragraph (f)(3)(v)(C) of Rule 17a-4 and paragraph (e)(3)(v)(C) of Rule 18a-6, as proposed to be amended.

⁷⁵ See paragraph (f)(3)(iv) of Rule 17a-4 and paragraph (e)(3)(iv) of Rule 18a-6, as proposed to be amended.

all information necessary to access and locate records preserved by means of the electronic recordkeeping system.⁸⁰

Paragraph (f)(3)(vii) of Rule 17a-4 provides that, for a broker-dealer exclusively using electronic storage media for some or all of its record preservation, at least one third party, who has access to and the ability to download information from the broker-dealer's electronic storage media to any acceptable medium under Rule 17a-4, must file with the DEA for the broker-dealer certain undertakings. The required text of the undertakings are set forth in the rule. They require the third party to undertake: (1) To furnish promptly to the Commission, the broker-dealer's SRO(s), and state securities regulators having jurisdiction over the broker-dealer (collectively, the "regulators"), upon reasonable request, such information as is deemed necessary by the regulators to download information kept on the broker-dealer's electronic storage media to any medium acceptable under Rule 17a-4; and (2) to take reasonable steps to provide access to information contained on the broker-dealer's electronic storage media, including, as appropriate, arrangements for the downloading of any record required to be maintained and preserved by the broker-dealer pursuant to Rules 17a-3 and 17a-4 in a format acceptable to the regulators. The rule further provides that these arrangements must provide specifically that in the event of a failure on the part of a broker-dealer to download the record into a readable format and after reasonable notice to the broker-dealer, upon being provided with the appropriate electronic storage medium, the third party will undertake to do so, as the regulators may request.

The Commission proposed similar requirements for Rule 18a-6(e).⁸¹ When adopting the rule, the Commission noted that commenters stated that the requirement "was outdated in light of the changed technological environment" and that providing a third party access to electronic recordkeeping systems and client information "needlessly exposes firms to data leakage and cybersecurity threats."⁸² The Commission stated that any change to the broker-dealer electronic storage provisions should be addressed in a separate regulatory initiative where the Commission intends to consider

electronic storage media issues in a broader context, including with respect to other market participants.⁸³ For these reasons, the Commission did not include these third-party access and undertakings requirements in Rule 18a-6(e).

The Commission preliminarily believes it is appropriate to eliminate the *third-party* access and undertakings requirements for the reasons discussed above. The Commission also preliminarily believes that the access and undertakings requirements may continue to serve a useful purpose. Electronic records may be held in a highly secure manner to address cybersecurity risks. For example, the records may be encrypted and access to them likely will require passwords and other forms of authentication. Therefore, producing them may require the cooperation of an individual who has the requisite knowledge to access the electronic recordkeeping system and retrieve the records stored on it. The access and undertakings requirements would be designed to provide a backup method for regulators to access records of a broker-dealer when the firm is either unable or unwilling to furnish records that the Commission and other securities regulators are entitled to examine pursuant to the Exchange Act and rules thereunder.⁸⁴ For example, there may be situations, such as when a broker-dealer is failing and customer assets are at risk, when prompt access to the records is critical to protecting investors. In this case, relying on access and undertakings requirements may result in the records being produced more promptly than relying solely on

other remedies for the firm's failure to produce the records.⁸⁵

For these reasons, the Commission is proposing to amend Rule 17a-4(f) to require at all times that a senior officer of the broker-dealer, who has independent access to and the ability to provide the records, execute the undertakings.⁸⁶ This would mean that

⁸⁵ The proposed access and undertakings requirements would not require actions that contravene any provision of otherwise applicable law or actions beyond reasonable steps.

⁸⁶ See paragraph (f)(3)(vii) of Rule 17a-4, as proposed to be amended. In addition to this amendment and the amendments discussed below, the Commission is proposing to amend the text of the access and undertakings requirements in the following ways: (1) The introductory text of paragraph (f)(3)(vii) would be modified to make a senior officer obligated to provide access to the records and the undertakings, and to conform to the proposed introductory text to paragraph (f)(3) by replacing the phrase "For every member, broker or dealer exclusively using electronic storage media for some or all of its record preservation under this section, at least one third party (the undersigned), who has access to and the ability to download information from the member's, broker's or dealer's electronic storage media to any acceptable medium under this section, must file with the designated examining authority for the member, broker or dealer the following undertakings with respect to such records:" with the phrase "Have at all times a senior officer of the member, broker, or dealer (hereinafter, the "undersigned"), who has independent access to and the ability to provide records maintained and preserved on the electronic recordkeeping system, file with the designated examining authority for the member, broker or dealer the following undertakings with respect to such records:"; (2) throughout the text of the undertaking references to the member, broker, or dealer would be replaced with bracketed references to insert the name of the member, broker, or dealer; (3) the first sentence of the undertakings would be modified to conform to proposed changes to Rule 17a-4(f) discussed above and below by replacing the last phrase in the sentence that reads "to download information kept on the member's, broker's or dealer's electronic storage media to any medium acceptable under § 240.17a-4" with the phrase "and to download copies of a record and its audit trail (if applicable) preserved by means of an electronic recordkeeping system of [Name of the Member, Broker, or Dealer] into both a human readable format and a reasonably usable electronic format in the event of a failure on the part of [Name of the Member, Broker, or Dealer] to download a requested record or its audit trail (if applicable);" (4) the second sentence of the undertakings would be modified to conform to proposed changes to Rule 17a-4(f) discussed above by replacing the first phrase of the sentence that reads "Furthermore, the undersigned hereby undertakes to take reasonable steps to provide access to information contained on the member's, broker's or dealer's electronic storage media, including, as appropriate, arrangements for the downloading of any record" with the phrase "Furthermore, the undersigned hereby undertakes to take reasonable steps to provide access to the information preserved by means of an electronic recordkeeping system of [Name of the Member, Broker, or Dealer], including, as appropriate, downloading any record;" and (5) the third sentence of the undertakings would be modified to conform to proposed changes to Rule 17a-4(f) discussed above by replacing it with the following sentence "Specifically, the undersigned will take reasonable steps that, in the event of a failure on the part of [Name of the Member, Broker, or Dealer] to download the record into a human readable

⁸³ *Id.*

⁸⁴ Paragraph (i) of Rule 17a4 has a similar undertaking requirement. See 17 CFR 240.17a-4(i). In particular, it provides, in pertinent part, that if the records required to be maintained and preserved pursuant to the provisions of Rules 17a-3 and 17a-4 are prepared or maintained by a third-party, the third party must file with the Commission a written undertaking in form acceptable to the Commission, signed by a duly authorized person. *Id.* The rule further provides that the undertaking must include the following provision: "[w]ith respect to any books and records maintained or preserved on behalf of [BD], the undersigned hereby undertakes to permit examination of such books and records at any time or from time to time during business hours by representatives or designees of the Securities and Exchange Commission, and to promptly furnish to said Commission or its designee true, correct, complete and current hard copy of any or all or any part of such books and records." *Id.* See also *Recordkeeping by Brokers and Dealers*, Exchange Act Release No. 13962 (Sept. 15, 1977), 42 FR 47551, 47552 (Sept. 21, 1977) (Paragraph (i) of Rule 17a-4 was adopted "to assure the accessibility of broker-dealer records in situations where, for example, a service bureau refuses to surrender the records due to nonpayment of fees.").

⁸⁰ See paragraph (f)(3)(vi) of Rule 17a-4 and paragraph (e)(3)(vi) of Rule 18a-6, as proposed to be amended. For the reasons discussed above, the proposed rule text does not refer to indexes.

⁸¹ See SBSD/MSBSP Recordkeeping Proposing Release, 79 FR at 25313.

⁸² See SBSD/MSBSP Recordkeeping Adopting Release, 84 FR at 68569.

the broker-dealer must at all times have at least one senior officer who has independent access to and the ability to provide the records to the regulators, and that officer would need to execute the required undertakings. Independent access would mean the senior officer has the knowledge, credentials, and information necessary to access and provide the records without having to rely on other individuals at the firm. Therefore, under the proposed rule, if the senior officer that executed the undertaking is unable or will no longer serve in that capacity at the firm, a different senior officer would have immediately to execute and deliver the undertaking. The objective is to have a senior officer at all times who can access and provide the records to the Commission and other securities regulators provide the undertaking. The Commission preliminarily believes this approach would address cybersecurity and trade secret concerns about requiring a third party to fulfill these responsibilities and, at the same time, provide the Commission and other securities regulators with a means to obtain records if the broker-dealer refuses to produce them in the normal course.

In this regard, the Commission is proposing to modify the first undertaking so that it is triggered if the broker-dealer fails to provide records and, if applicable, associated audit trails stored on the electronic recordkeeping system. As proposed, the senior officer would need to undertake to furnish promptly to the regulators, upon reasonable request, such information as is deemed necessary by the regulators, to download copies of a record and its audit trail (if applicable) kept by means of an electronic recordkeeping system by the broker-dealer into both a human readable format and a reasonably usable electronic format in the event of a failure on the part of the broker-dealer to download a requested record or its audit trail (if applicable). This modification would be intended to limit the senior officer's obligations to circumstances where employees or other officers of the broker-dealer are either unwilling or unable to access and download a requested record or its audit trail, when applicable. In the normal

format or a reasonably usable electronic format and after reasonable notice to [Name of the Member, Broker, or Dealer], the undersigned will download the record into a human readable format or a reasonably usable electronic format at the request of the staff of the staffs of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer]."

course, the Commission expects broker-dealers would produce the records to the regulators without the need of the senior's officer's intervention.

The proposed amendments to Rule 18a-6(e) would similarly require a senior officer of the SBS Entity, who has independent access to and the ability to provide the records, to execute undertakings consistent with the undertakings that would be required pursuant to Rule 17a-4(f), as proposed to be amended.⁸⁷ However, the undertakings would need to be filed with the Commission (rather than a DEA) because SBS Entities do not have a DEA.

F. Requirements for Broker-Dealers Using Micrographic Media To Preserve Records

As discussed above, the Commission believes most broker-dealers do not use micrographic media to preserve their records. However, because some broker-dealers may use this technology, the proposed amendments to Rule 17a-4(f) would preserve this recordkeeping option for broker-dealers.⁸⁸ The current requirements for broker-dealers using micrographic media are set forth in paragraphs (f)(3)(i) through (iv) of Rule 17a-4, which also set forth requirements for broker-dealers using electronic storage media. As discussed above, paragraph (f)(3) of Rule 17a-4 would be amended to set forth requirements solely for broker-dealers using electronic recordkeeping systems. Moreover, the current provisions of that paragraph would be modified to specifically address electronic recordkeeping systems. Consequently, they would not address the unique characteristics of micrographic media. For these reasons, the Commission is proposing to move the requirements for broker-dealers using micrographic media to new paragraph (f)(4) of Rule 17a-4.

G. Requirement To Produce Electronic Records in a Reasonably Usable Electronic Format

The Commission is also proposing to amend Rule 17a-4(j) to require that a broker-dealer must furnish any record and its audit trail (if applicable) preserved electronically pursuant to Rule 17a-4(f) in a reasonably usable electronic format, if requested by a representative of the Commission.⁸⁹ As

⁸⁷ See paragraph (e)(3)(vii) of Rule 18a-6, as proposed to be amended.

⁸⁸ See paragraph (f)(4) of Rule 17a-4, as proposed to be amended.

⁸⁹ See paragraph (j) of Rule 17a-4, as proposed to be amended. Paragraph (j) of Rule 17a-4 requires, among other things, that a broker-dealer promptly

discussed above, a reasonably usable electronic format would be a format that is common and compatible with commonly used systems for accessing and reading electronic records. The Commission similarly is proposing to amend Rule 18a-6(g) to require SBS Entities to furnish any record preserved electronically pursuant to Rule 18a-6(e) in a reasonably usable electronic format, if requested by a representative of the Commission.⁹⁰

III. Request for Comment

The Commission is requesting comments from all members of the public on all aspects of the proposed amendments to Rules 17a-4 and 18a-6. Commenters are requested to provide empirical data in support of any arguments or analyses. With respect to any comments, the Commission notes that they are of the greatest assistance to its rulemaking initiative if accompanied by supporting data and analysis of the issues addressed in those comments and by alternatives to the Commission's proposals where appropriate.

In addition to this general request for comment, the Commission is requesting comment on the following specific aspects of the proposals:

1. Is the proposal to replace the term "electronic storage media" in Rule 17a-4(f) and the term "electronic storage media" in Rule 18a-6(e) with the term "electronic recordkeeping system" appropriate? ⁹¹ If so, explain why. If not, explain why not. Is there a more appropriate term? If so, identify it and explain why it would be more appropriate.

2. Is the definition of "electronic recordkeeping system" in Rules 17a-4(f) and 18a-6(e), as proposed to be amended, appropriate? ⁹² If so, explain why. If not, explain why not. Is there a more accurate definition? If so, provide it and explain why it would be more accurate.

3. Is there a reason to retain the notification (including the 90-day notification) and representation requirements with respect to employing an electronic recordkeeping system in

furnish to a representative of the Commission "legible" copies of records. Consequently, the rule already requires the broker-dealer to produce human readable copies of records.

⁹⁰ Paragraph (g) of Rule 18a-6 requires, among other things, that an SBS Entity promptly furnish to a representative of the Commission "legible" copies of records. Consequently, the rule already requires the broker-dealer to produce human readable copies of records.

⁹¹ See section II.A. of the release (discussing these proposed amendments).

⁹² See section II.B. of the release (discussing these proposed amendments).

Rule 17a-4(f)?⁹³ If so, explain why. If not, explain why not. If the requirements should be retained, should analogous requirements be added to Rule 18a-6(e)? If so, explain why. If not, explain why not.

4. Is the proposal to limit the requirements for electronic recordkeeping systems (including the audit-trail and WORM requirements) in paragraph (e)(2) of Rule 18a-6 to nonbank SBS Entities appropriate?⁹⁴ If so, explain why. If not, explain why not. Would these requirements conflict with requirements and guidance of the U.S. prudential regulators governing the use of electronic recordkeeping systems by bank SBS Entities? If so, please identify the requirements and guidance of the prudential regulators that would conflict with the proposed requirements of paragraph (e)(2) of Rule 18a-6 and explain how they would conflict with those proposed requirements. Would it be appropriate to apply certain of the requirements of paragraph (e)(2) of Rule 18a-6 to bank SBS Entities? For example, would it be appropriate to apply the requirements other than the audit-trail and WORM requirements? If so, explain why. If not, explain why not.

5. Would the proposed rule text setting forth the audit-trail requirement achieve the Commission's objective of imposing an obligation that the electronic recordkeeping system be configured to permit the re-creation of an original record if it is altered, overwritten, or erased?⁹⁵ If so, explain why. If not, explain why not and suggest alternative rule text that would achieve this objective.

6. Would the proposed rule text requiring that the electronic recordkeeping system verify automatically the quality and accuracy of the electronic storage system storage and retention process achieve the Commission's objective that the electronic recordkeeping system be configured to ensure that when an original record is added to the electronic recordkeeping system it is completely and accurately captured in the system?⁹⁶ If so, explain why. If not, explain why not and suggest alternative rule text that would achieve this objective.

7. Is the proposed rule text requiring that the electronic recordkeeping system serialize the original and duplicate units

of the storage media, and time-date for the required period of retention the information placed on such electronic storage media, if applicable, appropriate?⁹⁷ If so, explain why. If not, explain why not. Does this requirement as it exists today only apply to electronic recordkeeping systems that use optical disk technology? If so, explain why. If not, identify other electronic recordkeeping systems for which serializing original and duplicate units of the storage media, and time-dating for the required period of retention the information placed on the electronic storage media is appropriate and done under current practices.

8. Is the proposed rule text requiring that the electronic recordkeeping system have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and a reasonably usable electronic format appropriate?⁹⁸ If so, explain why. If not, explain why not and suggest alternative rule text. What types of electronic record formats should be considered reasonably usable? Do broker-dealers and SBS Entities use unique (*i.e.*, proprietary) electronic formats? If so, can those electronic formats be converted into electronic formats that are reasonably usable?

9. Is the proposed rule text requiring that the electronic recordkeeping system have the capacity to readily download and transfer the information needed to locate the electronic record sufficiently clear?⁹⁹ If so, explain why. If not, explain why not. For example, what type of information is necessary to locate a specific record maintained and preserved on an electronic recordkeeping system? Are indexes used? If so, how? Are data fields used? If so, how? Should the rule be more specific in identifying the type of information necessary to locate a specific record maintained and preserved on an electronic recordkeeping system? If so, explain how and suggest alternative rule text.

10. Is the proposed rule text requiring the broker-dealer or SBS Entity to at all times have available, for examination by the regulators, facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records appropriate?¹⁰⁰ If so,

explain why. If not, explain why not and suggest alternative rule text. What type of facilities would be needed to meet this requirement?

11. Is the proposed rule text requiring the broker-dealer or SBS Entity to be ready at all times to provide immediately any record or information needed to locate records stored by means of the electronic recordkeeping system that the regulators may request appropriate?¹⁰¹ If so, explain why. If not, explain why not and suggest alternative rule text.

12. Is the proposed rule text requiring the broker-dealer or SBS Entity to maintain a backup electronic recordkeeping system appropriate and necessary?¹⁰² If so, explain why. If not, explain why not. For example, do broker-dealers maintain a backup electronic recordkeeping system with respect to the electronic records they preserve for business purposes? Are their other measures that broker-dealers take with respect to preserving their business-purpose electronic records that are designed to maintain access to the records if the electronic recordkeeping systems fails? If so, please identify and describe them and suggest how they could be incorporated into a final rule.

13. Is the proposed rule text requiring the broker-dealer or SBS Entity to organize and maintain information necessary to locate records maintained by the electronic recordkeeping system appropriate?¹⁰³ If so, explain why. If not, explain why not and suggest alternative rule text.

14. Is the proposed rule text requiring a broker-dealer or SBS Entity using an electronic recordkeeping system to have in place an auditable system of controls that records, among other things: The names of persons inputting, altering, or deleting a record; and the date and time such persons input, altered, or deleted the record appropriate?¹⁰⁴ For example, is this the type of information that could be used to examine whether the system is operating in conformance with the requirements of the proposed rule (*e.g.*, if the electronic recordkeeping system is adhering to the audit-trail requirement, that it is preserving records in a manner that allows the original record to be re-created if overwritten, erased, or otherwise altered)? If so, explain why. If not, explain why not and suggest alternative rule text. For example, is

⁹³ See section I.L.C. of the release (discussing these proposed amendments).

⁹⁴ See section I.L.D. of the release (discussing these proposed amendments).

⁹⁵ See section I.L.D. of the release (discussing these proposed amendments).

⁹⁶ See section I.L.D. of the release (discussing these proposed amendments).

⁹⁷ See section I.L.D. of the release (discussing these proposed amendments).

⁹⁸ See section I.L.D. of the release (discussing these proposed amendments).

⁹⁹ See section I.L.D. of the release (discussing these proposed amendments).

¹⁰⁰ See section I.L.E. of the release (discussing these proposed amendments).

¹⁰¹ See section I.L.E. of the release (discussing these proposed amendments).

¹⁰² See section I.L.E. of the release (discussing these proposed amendments).

¹⁰³ See section I.L.E. of the release (discussing these proposed amendments).

¹⁰⁴ See section I.L.E. of the release (discussing these proposed amendments).

there other information that would be necessary to achieve the objective of the requirement? If so, please identify it. Should the Commission add a requirement for a periodic audit to confirm that the auditable system of controls is working as appropriate? If so, should the required audit be internal or external?

15. Is the proposal to eliminate the requirement that a broker-dealer engage a third party with access to the firm's electronic records who undertakes to provide them to the Commission and other securities regulators appropriate? ¹⁰⁵ If so, explain why. If not, explain why not. Further, is the proposal to modify this requirement so that a senior officer of the broker-dealer must have access to the records and undertake to provide them to the Commission appropriate? If so, explain why. If not, explain why not. Should the Commission require that a second senior officer at all times have independent access to and the ability to provide the records and to execute the undertakings? If so, explain why. If not, explain why not. For example, would this increase insider cybersecurity risk compared to the proposed approach? Would switching from a third party to a senior officer reduce cybersecurity risk compared with the current third-party requirement? If so, explain why. If not, explain why not. Would switching to a senior officer provide the Commission and other securities regulators with adequate means to obtain records if the broker-dealer refuses to produce them in the normal course? If so, please explain. If not, explain why not.

16. What type of senior officer could fulfill the proposed access and undertakings requirements? For example, which senior officers have access to electronic recordkeeping systems? Are there any circumstances in which the senior officer would not be an associated person? Should the Commission specify which officers or officers with specific responsibilities and reporting lines that would be appropriate to provide the senior officer undertakings? If so, please identify them and explain why it would be appropriate for them to provide the undertakings.

17. Is the proposal to eliminate the option to place in escrow and keep current a copy of the physical and logical file format of the electronic storage media, the field format of all different information types written on the electronic storage media, and the source code, together with the

appropriate documentation and information necessary to access records and indexes, appropriate? If not, explain why. For example, do broker-dealers use this option?

18. Do broker-dealers or SBS Entities use micrographic media to store regulatory records? If not, should the Commission delete the option to use micrographic media in Rule 17a-4(f)? ¹⁰⁶ If so, should the Commission add an option to use micrographic media to Rule 18a-6(e)? Are the current requirements in Rule 17a-4(f) for broker-dealers using micrographic media consistent with this technology as it exists today? If so, explain why. If not, explain why not. Should the current requirements be updated? If so, explain how.

19. Should the Commission adopt a sunset provision after which time broker-dealers would no longer be able to use micrographic media? If so, explain why or why not. If not, please describe broker-dealers' continued use of micrographic media to store records. Would any broker-dealers incur costs in moving from micrographic media to paper or electronic storage media? If so, identify and explain the costs. Moreover, do broker-dealers continue to preserve records using paper, rather than electronic storage methods, to fulfill the record preservation requirements of Rule 17a-4? If so, please provide data as to the frequency of such use.

20. Are the proposed amendments to paragraphs (j) and (g) of Rules 17a-4 and 18a-6, respectively, that would require firms to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to paragraph (e) of this section in a reasonably usable electronic format, if requested by a representative of the Commission, appropriate? ¹⁰⁷ If not, explain why.

IV. Economic Analysis

The Commission is mindful of the economic effects, including the costs and benefits, of the proposed amendments. Section 3(f) of the Exchange Act provides that whenever the Commission is engaged in rulemaking pursuant to the Exchange Act and is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to the protection of investors, whether the action will

promote efficiency, competition, and capital formation.¹⁰⁸ In addition, Section 23(a)(2) of the Exchange Act requires the Commission, when making rules under the Exchange Act, to consider the impact such rules would have on competition.¹⁰⁹ Exchange Act Section 23(a)(2) also provides that the Commission shall not adopt any rule which would impose a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act.

The analysis below addresses the likely economic effects of the proposed amendments, including the anticipated and estimated benefits and costs of the amendments and their likely effects on efficiency, competition, and capital formation. The Commission also discusses the potential economic effects of certain alternatives to the approaches taken in this proposal. Many of the benefits and costs discussed below are difficult to quantify. For example, the Commission cannot quantify the number of entities that may already have electronic recordkeeping systems compliant with the proposed requirements; the extent to which some broker-dealers and SBS Entities may need to upgrade existing electronic recordkeeping systems to meet the proposed audit-trail requirement and costs thereof; or the degree to which broker-dealers and SBS Entities may currently pass along recordkeeping costs to customers and counterparties. While the Commission has attempted to quantify economic effects where possible, much of the discussion of economic effects is qualitative in nature.

A. Baseline

To assess the economic effects of the proposed amendments, the Commission is using as the baseline the broker-dealer and security-based swap markets as they exist at the time of this release, including applicable rules the Commission has already adopted, but excluding rules the Commission has proposed but not yet finalized.

With respect to broker-dealers, the regulatory baseline includes Rules 17a-4(f) and (j). In addition, as discussed above, the Commission has also issued interpretations of Rule 17a-4(f) for broker-dealers.¹¹⁰ With respect to SBS

¹⁰⁸ See 15 U.S.C. 78c(f).

¹⁰⁹ See 15 U.S.C. 78w(a)(2).

¹¹⁰ See Section II.D discussing Rule 17a-4(f) Interpretation. See *SBSD/MSBSP Recordkeeping Adopting Release*, 84 FR at 68568. As discussed above, the Commission would interpret the WORM requirement as set forth in the text of paragraph (e)(2)(i)(B) of Rule 18a-6, as proposed to be amended, consistently with how the WORM

¹⁰⁵ See section II.E. of the release (discussing these proposed amendments).

¹⁰⁶ See section II.F. of the release (discussing these proposed amendments).

¹⁰⁷ See section II.G. of the release (discussing these proposed amendments).

Entities, the regulatory baseline includes the statutory provisions pursuant to the Dodd-Frank Act and rules adopted by the Commission, compliance with which is required. This includes rules adopted by the Commission in the following adopting releases: The intermediary definitions release;¹¹¹ cross-border release;¹¹² security-based swap entity registration release;¹¹³ U.S. activity release;¹¹⁴ business conduct release;¹¹⁵ trade acknowledgment release;¹¹⁶ capital, margin, and segregation release;¹¹⁷ and the recordkeeping and reporting release adopting Rules 18a–6(e) and (g).¹¹⁸

The following sections discuss available data about the security-based swap market, affected SBS Entities, dual registrants, other security-based swap market participants, participant domiciles, and broker dealer activity.

1. Broker-Dealers

The market for broker-dealer services encompasses a relatively small set of large and medium sized broker-dealers and thousands of smaller broker-dealers competing for niche or regional segments of the market.¹¹⁹ The market for broker-dealer services includes many different markets for a variety of services related to the securities business, including (1) managing orders for customers and routing them to various trading venues; (2) providing advice to customers that is in connection with and reasonably related to their primary business of effecting securities transactions; (3) holding customers’ funds and securities; (4) handling clearance and settlement of trades; (5) intermediating between customers and carrying/clearing brokers; (6) dealing in corporate debt and equities, government bonds, and municipal bonds, among other

securities; (7) privately placing securities; and (8) effecting transactions in mutual funds that involve transferring funds directly to the issuer. Some broker-dealers may specialize in just one narrowly defined service, while others may provide a wide variety of services.

Based on an analysis of FOCUS filings as of December 2020, there were approximately 3,551 registered broker-dealers with over 186 million customer accounts.¹²⁰ In total, these broker-dealers have over \$5 trillion in total assets as reported on Form X–17A–5.¹²¹ More than two-thirds of all broker-dealer assets and more than one-third of all customer accounts are held by the 19 largest broker-dealers, as shown in Table 1.¹²² Of the broker-dealers registered with the Commission as of December 2020, 502 broker-dealers were dually registered as investment advisers.¹²³

TABLE 1—REGISTERED BROKER-DEALERS AS OF DECEMBER 2020

Size of broker-dealer (total assets)	Total number of BDs	Number of dually registered BDs *	Cumulative total assets (\$ bln)	Cumulative number of customer accounts
>\$50 billion	19	10	3,450	67,178,360
\$1 billion to \$50 billion	122	24	1,519	107,003,611
\$500 million to \$1 billion	25	5	17	639,425
\$100 million to \$500 million	129	31	27	932,529
\$10 million to \$100 million	507	98	18	9,771,667
\$1 million to \$10 million	1,047	194	3.7	383,646
<\$1 million	1,702	140	0.5	13,481
Total	3,551	502	5,036	185,922,719

* For purposes of this table, a dually registered broker-dealer is registered with either the Commission or a state as an investment adviser and a broker-dealer.

The Commission preliminarily estimates that 45 broker-dealers may be dually registered with the CFTC as

futures commission merchants as of December 31, 2020.¹²⁴

In addition to the above estimates of affected broker-dealers, over-the-counter (“OTC”) derivatives dealers will also be

requirement as set forth in the text of paragraph (f)(2)(ii)(A) of Rule 17a–4 was interpreted by the Commission in 2019 and 2003.

¹¹¹ See *Further Definition of “Swap Dealer,” “Security-Based Swap Dealer,” “Major Swap Participant,” “Major Security-Based Swap Participant” and “Eligible Contract Participant,”* Exchange Act Release No. 66868 (Apr. 27, 2012), 77 FR 30596 (May 23, 2012).

¹¹² See *Application of “Security-Based Swap Dealer” and “Major Security-Based Swap Participant” Definitions to Cross-Border Security-Based Swap Activities,* Exchange Act Release No. 72372 (June 25, 2014), 79 FR 47278, 47359 (Aug. 12, 2014).

¹¹³ See *Registration Process for Security-Based Swap Dealers and Major Security-Based Swap Participants,* Exchange Act Release No. 75611 (Aug. 5, 2015), 80 FR 48964, 48989 (Aug. 14, 2015).

¹¹⁴ See *Security-Based Swap Transactions Connected With a Non-U.S. Person’s Dealing Activity That Are Arranged, Negotiated, or Executed by Personnel Located in a U.S. Branch or Office of an Agent; Security-Based Swap Dealer De Minimis Exception,* Exchange Act Release No. 77104 (Feb. 10, 2016), 81 FR 8598 (Feb. 19, 2016).

¹¹⁵ See *Business Conduct Standards for Security-Based Swap Dealers and Major Security-Based Swap Participants,* Exchange Act Release No. 77617 (Apr. 14, 2016), 81 FR 29960, 30081 (May 13, 2019).

¹¹⁶ See *Trade Acknowledgment and Verification of Security-Based Swap Transactions,* Exchange Act Release No. 78011 (June 8, 2016), 81 FR 39808, 30143–44 (June 17, 2016).

¹¹⁷ See *SBSD/MSBSP Capital, Margin, and Segregation Adopting Release,* 84 FR 43872.

¹¹⁸ See *SBSD/MSBSP Recordkeeping Proposing Release,* 84 FR 68550.

¹¹⁹ See *Regulation Best Interest Adopting Release,* 84 FR at 33406. For simplification, the Commission presents this analysis as if the market for broker-dealer services encompasses one broad market with multiple segments, even though, in terms of competition, it could also be discussed in terms of numerous interrelated markets.

¹²⁰ The data is obtained from FOCUS filings as of December 2020. There may be a double-counting of customer accounts among, in particular, the larger broker-dealers as they may report introducing broker-dealer accounts as well in their role as clearing broker-dealers. Customer Accounts

includes both broker-dealer and investment adviser accounts for dual-registrants.

¹²¹ Assets are estimated by Total Assets (allowable and non-allowable) from Part II of the FOCUS filings (Form X–17A–5 Part II and Part IIA, available at https://www.sec.gov/files/formx-17a-5_2.pdf) and correspond to balance sheet total assets for the broker-dealer. The Commission does not have an estimate of the total amount of customer assets for broker-dealers because that information is not included in FOCUS filings. The Commission estimates broker-dealer size from the total balance sheet assets as described above.

¹²² Approximately \$4.97 trillion of total assets of broker-dealers (98.7%) are at broker-dealers with total assets in excess of \$1 billion.

¹²³ This estimate includes the number of broker-dealers who are also registered as state investment advisers.

¹²⁴ Using FOCUS Report data as of December 31, 2020, there are 45 broker-dealers that report commodity futures account activity in “Part II: Customer’s Regulated Commodity Futures Accounts.”

affected by the proposed recordkeeping amendments. The Commission estimates that 5 registered OTC derivatives dealers will be impacted by the proposed amendments to Rule 17a-4.

2. Security-Based Swap Markets: Activity and Participants

i. Available Data From the Security-Based Swap Market

The Commission's understanding of the market is informed, in part, by available data on security-based swap transactions, though the Commission acknowledges that limitations in the data limit the extent to which it is possible to quantitatively characterize the market.¹²⁵ Since this data does not cover the entire market, the Commission has analyzed market activity using a sample of transactions that includes only certain segments of the market. The Commission believes, however, that the data underlying this analysis provides reasonably comprehensive information regarding single-name credit default swap ("CDS") transactions and the composition of the participants in the single-name CDS market.

The Commission's analysis of the current state of the security-based swap market is based on data obtained from the Depository Trust & Clearing Corporation ("DTCC") Derivatives Repository Limited Trade Information Warehouse ("TIW"), especially data regarding the activity of market participants in the single-name CDS market during the period from 2008 to 2021.¹²⁶ Although the definition of security-based swaps is not limited to single-name CDS,¹²⁷ the Commission believes that the single-name CDS data is sufficiently representative of the

¹²⁵ The Commission also relies on qualitative information regarding market structure and evolving market practices provided by commenters and the knowledge and expertise of Commission staff.

¹²⁶ In prior releases, the Commission has examined data for other time periods. For example, in the business conduct standards adopting release, the Commission presented an analysis of TIW data for November 2006 through December 2014. While the exact numbers of various groups of transacting agents and account holders in that analysis differ from the figures reported in this section (for a longer time period), the Commission does not observe significant structural differences in market participation. *Compare* 81 FR at 30102 (Tables 1 and 2), with Tables 1 and 2 below.

¹²⁷ While other repositories may collect data on transactions in total return swaps on equity and debt, the Commission does not currently have access to such data for these products (or other products that are security-based swaps). Additionally, the Commission explains below that data related to single-name CDS provides reasonably comprehensive information for the purpose of this analysis.

market to inform our analysis of the current security-based swap market.

According to data published by the Bank for International Settlements ("BIS"), the global notional amount outstanding in single-name CDS was approximately \$3.5 trillion,¹²⁸ in multi-name index CDS was approximately \$4.5 trillion, and in multi-name, non-index CDS was approximately \$347 billion.¹²⁹ The total gross market value outstanding in single-name CDS was approximately \$77 billion, and in multi-name CDS instruments was approximately \$125 billion.¹³⁰ The global notional amount outstanding in equity forwards and swaps as of December 2020 was \$3.6 trillion, with total gross market value of \$321 billion.¹³¹

ii. Affected SBS Entities

Final SBS Entity registration rules have been adopted and compliance was required as of November 1, 2021.¹³² As of November 9, 2021, there are 41 entities registered with the Commission as SBSs, and no entities have registered as MSBSPs.¹³³

Firms that act as dealers play a central role in the security-based swap market.

¹²⁸ The global notional amount outstanding represents the total face amount used to calculate payments under outstanding contracts. The gross market value is the cost of replacing all open contracts at current market prices.

¹²⁹ See BIS, *Semi-annual OTC derivatives statistics at December 2020*, Table D5.2, available at <https://stats.bis.org/statx/srs/table/d5.2> (accessed Aug. 18, 2021).

¹³⁰ See *id.*

¹³¹ These totals include swaps and security-based swaps, as well as products that are excluded from the definition of "swap," such as certain equity forwards. See *OTC, equity-linked derivatives statistics*, Table D5.1, available at <https://stats.bis.org/statx/srs/table/d5.1> (accessed Aug. 18, 2021). For the purposes of this analysis, the Commission assumes that multi-name index CDS are not narrow-based index CDS and therefore, do not fall within the *security-based swap* definition. See 15 U.S.C. 78c(a)(6)(A); see also *Further Definition of "Swap," "Security-Based Swap," and "Security-Based Swap Agreement"; Mixed Swaps; Security-Based Swap Agreement Recordkeeping*, 77 FR 48208. The Commission also assumes that all instruments reported as equity forwards and swaps are security-based swaps, potentially resulting in underestimation of the proportion of the security-based swap market represented by single-name CDS. Therefore, when measured on the basis of gross notional outstanding single-name CDS contracts appear to constitute roughly 49% of the security-based swap market. Although the BIS data reflects the global OTC derivatives market, and not just the U.S. market, the Commission has no reason to believe that these ratios differ significantly in the U.S. market.

¹³² See *Key Dates for Registration of Security-Based Swap Dealers and Major Security-Based Swap Participants*, available at: <https://www.sec.gov/page/key-dates-registration-security-based-swap-dealers-and-major-security-based-swap-participants>.

¹³³ See section V.C. of this release (discussing the number of SBS Entities that would be subject to the proposed rules).

Based on an analysis of 2020 single-name CDS data in TIW, accounts of dealers intermediated transactions with a gross notional amount of approximately \$1.99 trillion, with approximately 55 percent of the gross notional intermediated by the top five dealer accounts.¹³⁴

iii. Other Markets and Dual Registrants

The numerous financial markets are integrated, often attracting the same market participants that trade across corporate bond, swap, and security-based swap markets, among others. For example, persons who will register as SBS Entities are likely also to be engaged in swap activity. In part, this overlap reflects the relationship between single-name CDS contracts, which are security-based swaps, and index CDS contracts, which may be swaps or security-based swaps. A single-name CDS contract covers default events for a single reference entity or reference security. Index CDS contracts and related products make payouts that are contingent on the default of index components and allow participants in these instruments to gain exposure to the credit risk of the basket of reference entities that comprise the index, which is a function of the credit risk of the index components. A default event for a reference entity that is an index component will result in payoffs on both single-name CDS written on the reference entity and index CDS written on indices that contain the reference entity. Because of this relationship between the payoffs of single-name CDS and index CDS products, prices of these products depend upon one another,¹³⁵ creating hedging opportunities across these markets.

These hedging opportunities mean that participants that are active in one market are likely to be active in the other. Commission staff analysis of approximately 4,149 TIW accounts that participated in the market for single-name CDS in 2020 revealed that approximately 3,096 of those accounts, or 75 percent, also participated in the market for index CDS. Of the accounts that participated in both markets, data regarding transactions in 2020 suggests that, conditional on an account transacting in notional volume of index CDS in the top third of accounts, the

¹³⁴ The Commission staff analysis of TIW transaction records indicates that approximately 99% of single-name CDS price-forming transactions in 2020 involved an ISDA-recognized dealer.

¹³⁵ "Correlation" typically refers to linear relationships between variables; "dependence" captures a broader set of relationships that may be more appropriate for certain swaps and security-based swaps. See, e.g., George Casella & Roger L. Berger, *Statistical Inference* 171 (2nd ed. 2002).

probability of the same account landing in the top third of accounts in terms of single-name CDS notional volume is approximately 61 percent; by contrast, the probability of the same account landing in the bottom third of accounts in terms of single-name CDS notional volume is only 11 percent.

Of the 25 SBSs subject to Rule 18a-6(e), 24 are dually registered with the CFTC as swap dealers and are therefore subject to CFTC requirements for entities registered with the CFTC as swap.¹³⁶ Additionally, there are six SBSs that are already or will be subject to Rule 17a-4. Further, of 41 entities registered as SBSs, 26 have a prudential regulator.

3. Recordkeeping Practices of Market Participants

Notwithstanding the Commission's 2003 and 2019 interpretations of the WORM requirement (*i.e.*, that it can be met with software solutions) described above,¹³⁷ the Commission understands that some affected broker-dealers maintain electronic recordkeeping systems used daily for business purposes and separate electronic recordkeeping systems used to meet the WORM requirement. The Commission does not have data regarding the number of affected broker-dealers that maintain separate electronic recordkeeping systems for these purposes or data sufficient for the Commission to evaluate the likelihood that affected broker-dealers maintain separate electronic recordkeeping systems for business purposes that do or do not satisfy the WORM requirement. As a result, the Commission cannot estimate the frequency with which separate electronic recordkeeping systems are maintained for these purposes.

The Commission understands that third-party vendors developed software-based solutions designed to meet the WORM requirement of Rule 17a-4(f).¹³⁸

¹³⁶ See section VI.F. of this release (discussing the CFTC's electronic recordkeeping rules). See also section V.C. of this release (discussing the number of SBSs that would be subject to the proposed rules).

¹³⁷ See sections I.B.1. and II.D. of this release (discussing the interpretations and broker-dealers' response to them).

¹³⁸ See, *e.g.*, Global Relay, *Global Relay Archive*, available at: <https://www.globalrelay.com/gr-services/archive>; Amazon, *Protecting data with Amazon S3 Object lock*, available at: <https://aws.amazon.com/blogs/storage/protecting-data-with-amazon-s3-object-lock/>; Cohasset Associates, *Compliance Assessment: Amazon Web Services (AWS) Simple Storage Service (S3)*, available at: <https://d1.awsstatic.com/r2018/b/S3-Object-Lock/Amazon-S3-Compliance-Assessment.pdf>; Microsoft, Securities and Exchange Commission (SEC) Rule 17a-4(f) United States, available at: <https://>

However, affected broker-dealers do not commonly use such record systems for business purposes. Broker-dealers have explained to Commission staff that the electronic recordkeeping systems used for business purposes are dynamic, updated constantly (*e.g.*, with each new transaction or position), and easily accessible for retrieving records, whereas WORM databases are more akin to static "snapshots" of the records at a point in time and are less accessible for business purposes. As discussed in more detail above, the Commission preliminarily believes that affected broker-dealers generally deploy an electronic recordkeeping system that serves no purpose other than to hold records in a manner that meets the Commission's regulatory requirements for electronic recordkeeping systems.¹³⁹ The Commission also believes that some affected SBS Entities currently have systems complying with the electronic recordkeeping requirements under Rule 18a-6 as it presently stands, which does not include a WORM or audit-trail requirement.¹⁴⁰

As discussed above, a number of affected entities are dually registered with the CFTC as swap dealers. Under the CFTC's electronic recordkeeping rule, affected entities must configure their recordkeeping systems and have policies and procedures governing those systems that are designed to prevent records from being altered or erased.

B. Benefits of the Proposed Amendments

The proposed amendments are intended to modernize the SBS Entity and broker-dealer recordkeeping rules given technological changes over the last two decades. The Commission preliminarily believes that by specifying that nonbank SBS Entities¹⁴¹ and

docs.microsoft.com/en-us/compliance/regulatory/offering-sec-17a-4.

¹³⁹ See section II.D. of this release (discussing broker-dealers' use of WORM compliant electronic recordkeeping systems).

¹⁴⁰ As noted above in section II.D. of this release, it is the Commission's understanding that electronic recordkeeping systems used by nonbank SBS Entities as well as by broker-dealers for business purposes can be configured to meet the audit-trail requirement.

¹⁴¹ With respect to SBS Entities, the proposal would limit the electronic recordkeeping requirements to SBS Entities that do not have a prudential regulator in order to avoid subjecting bank SBS Entities to potentially differing requirements with respect to electronic record preservation. As discussed above, 26 SBS Entities have a prudential regulator (*i.e.*, are bank SBS Entities). The exclusion of bank SBS Entities from the scope of the proposed electronic recordkeeping system requirements would reduce aggregate benefits and costs related to modifying electronic recordkeeping systems to conform to the proposed amendment to paragraph (e)(2) of Rule 18a-6.

broker-dealers may satisfy their electronic recordkeeping obligations through the WORM requirement or an audit-trail alternative, the proposed amendments may result in nonbank SBS Entities or broker-dealers updating electronic recordkeeping systems in ways that would lower compliance costs. For example, nonbank SBS Entities or broker-dealers may, among other things, reduce or eliminate duplicative compliance systems in circumstances where they currently maintain separate electronic recordkeeping systems primarily due to, as applicable, the WORM requirement or Rule 18a-6(e)'s electronic storage system requirements. The Commission expects that these reductions would primarily be realized by broker-dealers that may, for example, choose to adopt a single recordkeeping system that complies with the audit-trail requirement—for business and regulatory purposes. Below, the Commission estimates the reduction in initial and ongoing costs and burdens related to these proposals.¹⁴²

These aggregate cost savings may be reduced by three factors. First, some affected entities may have already streamlined their regulatory electronic recordkeeping systems with systems used for business records consistent with the Commission interpretations described above. Second, some affected entities may elect to upgrade existing business recordkeeping systems to accommodate the proposed audit-trail alternative. The affected entities that choose to undertake such upgrades may do so if aggregate savings from eliminating redundant electronic recordkeeping systems outweigh the costs of buildout for existing systems. The Commission expects that these costs would primarily be realized by broker-dealers. However, potential buildout costs may decrease the cost savings from the proposal. Third, because the proposal would not require broker-dealers to make changes to recordkeeping systems that are currently compliant with the WORM requirement, they may choose not to make any changes to recordkeeping systems. Such broker-dealers may, for example, choose to continue maintaining separate recordkeeping systems for business purposes and for regulatory purposes.

The proposal may also benefit customers and counterparties of broker-dealers and nonbank SBS Entities. Specifically, to the extent that broker-

¹⁴² See section V.D. of this release (discussing increases and decreases in costs and burdens relating to proposals for purposes of the Paperwork Reduction Act).

dealers and nonbank SBS Entities currently pass on part or all of their recordkeeping costs to their customers and counterparties, some of the above cost savings may flow through to customers and counterparties of broker-dealers and nonbank SBS Entities in the form of lower costs or greater availability of services. The extent to which cost savings are passed along to customers and counterparties will depend on several factors, including the price elasticity of the demand for broker-dealer and nonbank SBS Entity services, the substitutability of broker-dealers and nonbank SBS Entities, concentration in the broker-dealer and nonbank SBS Entity industries due to economies of scale, heterogeneity of broker-dealer and nonbank SBS Entity services, and market segmentation, among others.

The proposal may also enhance Commission oversight of nonbank SBS Entities and broker-dealers. To the degree that the proposal may lead broker-dealers and nonbank SBS Entities to move to a single recordkeeping system for both business and regulatory purposes, and if affected entities direct compliance cost savings to investments in system improvements and maintenance, the reliability and efficiency of recordkeeping systems may increase. Moreover, the Commission preliminarily believes that the proposed audit-trail and WORM alternatives will provide flexibility for broker-dealers and nonbank SBS Entities, while still maintaining the essential ability of the Commission to access the entities' records in the course of examinations or other activities.

The Commission preliminarily believes that some of the proposed amendments may provide compliance efficiencies. For example, the proposed amendments related to the verification of completeness and accuracy of the processes for retaining records electronically may introduce time efficiencies in achieving compliance when an original record is added to the electronic recordkeeping system. Similarly, proposed amendments to provide additional specificity to the obligations relating to the auditable system of controls required by paragraph (f)(3)(v) and Rule 17a-4 and Rule paragraph (e)(3)(v) of Rule 18a-6 may introduce time and compliance efficiencies by lowering burdens on compliance professionals' time. Further, the Commission preliminarily believes that the elimination of the notification and representation requirements from Rule 17a-4(f) would alleviate some

burden currently imposed on broker-dealers, as discussed below.¹⁴³

In addition, the proposed elimination of the *third-party* access and undertakings requirements may benefit affected entities by reducing cybersecurity and trade-secret risks attendant to requiring a third party to fulfill these responsibilities. Similarly, the proposed elimination of the escrow account option may reduce cybersecurity risk attendant to having this information held by a third party in escrow.¹⁴⁴

Certain of the proposed amendments may also incrementally improve regulatory oversight. For example, proposed amendments related to the ability to download and transfer records in human readable and reasonably usable electronic formats may facilitate more efficient Commission oversight as they would reduce the time costs of staff review of individual records as well as searching and sorting electronic records. Further, the proposed amendments requiring that a senior officer provide required undertakings may provide the Commission with a means to obtain records if an affected entity refuses to produce them in the normal course, which may enhance the efficiency of Commission examinations and oversight.

C. Costs of the Proposed Amendments

The proposed amendments are intended to modernize the Commission's recordkeeping requirements and to reduce recordkeeping duplication by affected entities. However, as referenced above, the Commission recognizes that some broker-dealers and nonbank SBS Entities may bear costs from having to alter electronic recordkeeping systems currently used. Nonbank SBS Entities may, for example, need to alter electronic storage systems to comply with either the audit-trail or WORM requirement. In addition, broker-dealers may need to build new or alter existing

¹⁴³ See section V.D. of this release (discussing increases and decreases in costs and burdens relating to proposals for purposes of the Paperwork Reduction Act).

¹⁴⁴ The Commission does not expect significant benefits or costs associated with certain other amendments contemplated in the proposal that the Commission believes are technical in nature. These amendments include simplification of the introductory text of paragraph (f)(3) of Rule 17a-4 and paragraph (e)(3) of Rule 18a-6; amendments to paragraphs (f)(3)(i) of Rule 17a-4 and (e)(3)(i) of Rule 18a-6 to replace terms tied to micrographic media and optical disk technology; amendments to better clarify paragraph (f)(3)(ii) of Rule 17a-4 and paragraph (e)(3)(ii) of Rule 18a-6; and amendments moving the requirements for broker-dealers using micrographic media to new paragraph (f)(4) of Rule 17a-4.

electronic recordkeeping systems to the extent they would like to meet the audit-trail requirement. As noted below,¹⁴⁵ based upon information provided to the Commission by the securities industry, the Commission estimates that the initial cost to build and implement a WORM-compliant electronic recordkeeping system for a large broker-dealer is \$10 million, with an additional cost of \$1.2 million annually to maintain the system,¹⁴⁶ and the Commission believes that the SBS Entities that would be affected by the proposed rule amendments are of large sizes comparable to the universe of broker-dealers that the rulemaking petitioners used to derive those estimates. In addition, based on feedback from the securities industry, the Commission believes that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirements and the ongoing cost to maintain the system would be substantially lower than the analogous costs that would be incurred with respect to a WORM-compliant system.¹⁴⁷ In particular, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for a large broker-dealer or SBS Entity without a prudential regulator and that is not a broker-dealer is \$1,000,000, with an additional cost of \$120,000 annually to maintain the system.

There are 802 broker-dealers with assets greater than \$10 million and four SBSDs that would be subject to paragraph (e)(2) of Rule 18a-6. The Commission anticipates that eliminating the application of paragraph (e)(2) of Rule 18a-6 to the 21 SBSDs that have a prudential regulator and are subject to Rule 18a-6 would result in a decrease of 100 hours per firm on an annual basis, or 2,100 hours per year for all firms affected by the proposed amendment, for an ongoing cost savings of \$663,000 per year for all affected firms.¹⁴⁸

The Commission does not believe any broker-dealers or SBSDs will elect to build a WORM-compliant electronic recordkeeping system. Moreover, the Commission estimates that most of these firms have electronic recordkeeping

¹⁴⁵ See section V.D. of this release (discussing decreases and increases in costs and burdens relating to proposals for purposes of the Paperwork Reduction Act).

¹⁴⁶ See Rule 17a-4(f) Rulemaking Petition Addendum at 4-5.

¹⁴⁷ See e.g. Rule 17a-4(f) Rulemaking Petition at 6-7.

¹⁴⁸ 2,100 hours × \$316 per hour (at the compliance manager rate) = \$663,000.

systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system. The Commission estimates that 20 of these firms would elect to build a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$20,000,000 and an annual cost burden of \$2,400,000.

The Commission estimates that the cost for the 2,749 broker-dealers with \$10,000,000 or less in total assets to build and maintain an electronic recordkeeping system that meets the proposed audit-trail requirement would be significantly less than the \$1,000,000 initial and \$120,000 annual costs estimated for the 802 larger broker-dealers and four SBSs that would be subject to paragraph (e)(2) of Rule 18a-6. Consequently, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for these smaller broker-dealers is \$100,000, with an additional cost of \$12,000 annually to maintain the system. The Commission estimates that most of the 2,749 broker-dealers with \$10,000,000 or less in total assets will continue to preserve records in the manner they do today: Using a WORM-compliant system, using micrographic media, or maintaining paper records. The Commission estimates that 80 of these firms would elect to build a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$8,000,000 and an annual cost burden of \$960,000.

The Commission believes that broker-dealers and SBS Entities would incur an initial burden and ongoing annual burden in establishing a backup electronic recordkeeping system. The Commission believes these burdens and costs would be substantially less than the burdens and costs of the primary electronic recordkeeping systems because of the benefit of economies of scale for the backup system whereby common technology and personnel could be used for both systems. The Commission estimates that the costs and burdens for the 802 larger broker-dealers and four SBSs that would be subject to paragraph (e)(2) of Rule 18a-6 would be \$250,000 in initial burdens and costs and \$30,000 in annual burdens and costs. Further, the Commission expects that the broker-dealers and SBS Entities that have electronic recordkeeping systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system also

maintain backup recordkeeping systems for business continuity purposes. Therefore, the initial and annual costs would be incurred by the 20 firms that elect to build a new electronic recordkeeping system that meets the proposed audit-trail requirements. Consequently, the Commission estimates that the industry-wide costs and burdens for these firms would be \$5,000,000 in initial costs and burdens and \$600,000 in annual costs and burdens.

The Commission estimates that the costs and burdens incurred by the 80 smaller broker-dealers that would build electronic recordkeeping systems to meet the audit-trail requirement and, therefore, need to build a backup recordkeeping system, would be substantially less than the costs and burdens incurred by the larger broker-dealers. The Commission estimates that these firms would incur an initial costs and burdens of \$25,000 and ongoing annual costs and burdens of \$3,000. Therefore, the Commission estimates that the industry-wide costs and burdens for these firms would be \$2,000,000 in initial costs and burdens and \$240,000 in ongoing annual costs and burdens.

The Commission recognizes that the proposal would not harmonize with the parallel recordkeeping rule for CFTC registrants (*e.g.*, futures commission merchants and swap dealers). In contrast, the proposal would impose a bright line audit-trail or WORM requirement. To the degree that such requirements may not satisfy CFTC requirements, a lack of harmonization in the recordkeeping requirement for registrants may give rise to compliance inefficiencies for broker dealers and SBS Entities that are dually registered with the CFTC.

Certain other aspects of the proposed amendments may also impose costs on affected entities. Specifically, the proposed amendments related to human readable and reasonably usable electronic file formats may impose compliance costs related to the required updates to recordkeeping systems.¹⁴⁹ Proposed amendments to third-party access and undertakings requirements may also impose additional time demands on senior officers, though these costs may be at least partially offset for broker-dealers by savings attendant to removing the requirement for third-party access. To the extent that these proposed requirements increase

¹⁴⁹ See section V.D. of this release (discussing increases and decreases in costs and burdens relating to proposals for purposes of the Paperwork Reduction Act).

the scope of senior officer duties and increase potential liability on the part of senior officers, senior officers may demand higher compensation and liability insurance, which may result in an increase to senior officer recruitment and retention costs. Further, amendments requiring broker-dealers and SBS Entities to have a backup set of records when records are preserved on an electronic recordkeeping system may impose additional costs related to making updates to compliance systems, as compared to the current rules' requirements to store separately from originals a duplicate copy of a record.¹⁵⁰

D. Reasonable Alternatives

The Commission has considered a number of alternatives. For example, the Commission has considered harmonizing the recordkeeping rules for SBS Entities with the CFTC's principles-based approach applicable to Swap Entities, but retaining the proposed audit-trail requirement for broker-dealers. As another alternative, the Commission considered harmonizing recordkeeping rules for both broker-dealers and SBS Entities with the CFTC's principles-based approach. These alternatives could enhance the cost savings from the proposal as affected entities may not need to modify their business recordkeeping systems to meet the proposed electronic recordkeeping system requirements, particularly with respect to nonbank SBS Entities that would need to use electronic recordkeeping systems that meet the WORM or audit-trail requirement. In addition, these alternatives could facilitate transactions across integrated swap and security-based swap markets. The Commission believes that its proposed rule amendments establishing electronic recordkeeping requirements for SBS Entities should provide greater protection to the original records created and preserved by SBS Entities, thereby giving regulators more reliable and secure access to those records. Unlike the CFTC's 2017 amendment, the Commission's proposal retains the WORM standard as a compliance option; the standard requires electronic

¹⁵⁰ The Commission does not expect significant costs associated with certain other amendments contemplated in the proposal, including amendments to eliminate the notification and representation requirements from Rule 17a-4(f); amendments to eliminate the escrow account option from paragraph (f)(3)(vi) of Rule 17a-4 and paragraph (e)(3)(vi) of Rule 18a-6; and amendments to the requirements of paragraph (f)(2)(ii)(B) of Rule 17a-4 and paragraph (e)(2)(i) of Rule 18a-6 to provide additional specificity regarding the requirement that original records are completely and accurately captured.

records to be maintained exclusively in a non-rewriteable, non-erasable format. The audit-trail alternative would require that the electronic records be preserved in a manner that permits the recreation of an original record if it is altered, overwritten, or erased. Moreover, the Commission believes that its proposal addresses the same concerns addressed in the CFTC proposal, namely the security and authenticity of and access to records.¹⁵¹ Finally, the Commission preliminarily believes that the costs related to modification of existing business recordkeeping systems to meet the proposed electronic recordkeeping system requirements are likely to be low relative to the baseline ongoing costs of maintaining duplicative recordkeeping systems. Thus, the relative magnitude of this benefit of the alternative may be limited.

As another alternative, the Commission could require prudentially regulated SBS Entities to meet the proposed electronic recordkeeping system requirements. This alternative would expand the scope of application of the requirements, magnifying its benefits for Commission oversight as well as costs of altering existing recordkeeping systems. As a baseline matter, the Commission recognizes that prudentially regulated SBS Entities are subject to a robust system of recordkeeping requirements for different types of activities, including recordkeeping requirements under the Bank Secrecy Act regarding funds transfers equal to or greater than \$3,000;¹⁵² recordkeeping requirements regarding fiduciary accounts;¹⁵³ recordkeeping requirements for securities transactions;¹⁵⁴ and recordkeeping requirements for small business and farm loans, including a requirement to maintain the information in machine readable form.¹⁵⁵ Importantly, as discussed above, the Commission preliminarily believes that the proposed rule's requirements may conflict or overlap with the recordkeeping systems banks have implemented under regulations or guidance of the prudential regulators. The Commission preliminarily believes that requiring prudentially regulated SBS Entities to meet the proposed electronic recordkeeping system requirements (in addition to the recordkeeping requirements these

entities are already subject to) would not create significant incremental benefits.

As another alternative, the Commission could have proposed eliminating the WORM alternative and requiring all broker-dealers and nonbank SBS Entities to comply with an audit-trail requirement. This alternative would require all affected entities to modernize their recordkeeping systems to meet the audit-trail requirement. While this alternative could produce long-term compliance efficiencies for a greater number of affected participants, it would also require all affected entities with WORM compliant systems to upgrade their electronic recordkeeping systems. Since compliance costs may be particularly burdensome for smaller entities, the alternative could have a disproportionate effect on smaller and medium-sized broker-dealers.

Finally, the Commission could have proposed requiring that a second senior officer has independent access to and the ability to provide the records and to execute the undertakings at all times. To the degree that relying on a single senior officer may present risks that the senior officer is unable or unwilling to obtain records, this alternative could increase the probability that the Commission would be able to access records. Thus, relative to the proposal, the alternative may further enhance the efficiency of Commission examinations and oversight. However, this alternative may impose additional time demands on a second senior officer in each affected entity. To the extent that the alternative would increase the scope of duties and increase potential liability on the part of a greater number of senior officers of affected entities, more senior officers may demand higher compensation and liability insurance, which may result in a greater increase to senior officer recruitment and retention costs relative to the proposal. Requiring a second individual to have the authority to grant access to the records may potentially increase cybersecurity risks compared to the proposed approach, although it would likely still represent less risk than the baseline third-party approach.

E. Effects on Efficiency, Competition, and Capital Formation

The primary effect of the proposed amendments on efficiency would stem from increased efficiency of broker-dealer and SBS Entity recordkeeping. Permitting either the audit-trail or WORM (introduced in the optical disk era) alternative is intended to allow broker-dealers and SBS Entities to modernize the records and systems such entities maintain for regulatory

purposes. The Commission anticipates that most of the affected entities would respond to such a requirement by eliminating duplicative recordkeeping for regulatory and business purposes, giving rise to cost efficiencies discussed above. The proposal would not alter the amount, type, or manner of disclosures available to investors or the Commission, nor would it change broker-dealer or SBS Entity business models or activities. Thus, the Commission does not anticipate the proposal to impact informational or allocative efficiency.

The proposed amendments are not expected to significantly impact competition between bank and nonbank SBS Entities. As described above, the proposal would impose electronic recordkeeping system requirements (including the audit-trail alternative) on nonbank SBS Entities, but not on bank SBS Entities. Transitioning regulatory recordkeeping systems from hardware solutions (such as optical disks) meeting the WORM requirement to electronic records compliant with the audit-trail requirement may require costly modifications to existing recordkeeping systems of broker-dealers and nonbank SBS Entities may need to modify existing electronic recordkeeping systems to meet either the WORM or audit-trail requirement; bank SBS Entities would not bear such costs.

To the extent that the proposal results in cost savings for broker-dealers and SBS Entities estimated above, affected entities may be able to allocate newly available capital into capital forming activities. However, it is not clear that affected entities would direct cost savings to expanding their financial intermediation business and given the magnitude of the cost savings estimated above, the capital formation effects of the proposal are likely limited. Therefore, the proposal is also not expected to have significant effects on capital formation.

F. Request for Comment

The Commission requests comment on all aspects of the economic analysis of the proposed amendments. To the extent possible, the Commission requests that commenters provide supporting data and analysis with respect to the benefits, costs, and effects on competition, efficiency, and capital formation of adopting the proposed amendments or any reasonable alternatives. In particular, the Commission asks commenters to consider the following questions:

1. What additional qualitative or quantitative information should the Commission consider as part of the

¹⁵¹ Compare Rule 17a-5(f)(3), as proposed to be amended and Rule 18a-6(e)(3), as proposed to be amended, with CFTC Section 1.31(d)(2).

¹⁵² See, e.g., 31 CFR 1020.410.

¹⁵³ See 12 CFR 9.8.

¹⁵⁴ See 12 CFR 12.3.

¹⁵⁵ See 12 CFR 25.42.

baseline for its economic analysis of these amendments? How many broker-dealers are maintaining separate recordkeeping systems for business and regulatory purposes? How many broker-dealers and SBS Entities affected by the proposed amendments have electronic recordkeeping systems that would meet the proposed audit-trail requirement?

2. Has the Commission accurately characterized the costs and benefits of proposed amendments? If not, why not? Should any of the costs or benefits be modified? What, if any, other costs or benefits should the Commission take into account? If possible, please offer ways of estimating these costs and benefits. What additional considerations can the Commission use to estimate the costs and benefits of the proposed amendments?

3. Has the Commission accurately characterized the effects on competition, efficiency, and capital formation arising from the proposed amendments? If not, why not?

4. Has the Commission accurately characterized the economic effects of the above alternatives? For example, has the Commission accurately characterized the economic effects of the alternative requiring prudentially regulated SBS Entities to meet the proposed electronic recordkeeping system requirements? If not, why not? Should any of the costs or benefits be modified? What, if any, other costs or benefits should the Commission take into account?

5. Are there other reasonable alternatives to the proposed amendments? What are the economic effects of any other alternatives?

6. Are there data sources or data sets that can help the Commission refine its estimates of the costs and benefits associated with the proposed amendments? If so, please identify them.

V. Paperwork Reduction Act

Certain provisions of the rule amendments proposed in this release would contain a new “collection of information” within the meaning of the Paperwork Reduction Act of 1995 (“PRA”).¹⁵⁶ The Commission is submitting the proposed rule amendments and proposed new rules to the Office of Management and Budget (“OMB”) for review and approval in accordance with the PRA and its implementing regulations.¹⁵⁷ 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.¹⁵⁸ The titles for the collections of information are:

(1) Rule 17a-4—Records to be preserved by certain brokers and dealers (OMB control number 3235-0279); and

(2) Rule 18a-6—Records to be preserved by certain security-based swap dealers and major security-based swap participants (OMB control number 3235-0751).

The burden estimates contained in this section do not include any other possible costs or economic effects beyond the burdens required to be calculated for PRA purposes.

A. Summary of Collections of Information

1. Proposed Amendments to Rules 17a-4(f) and 18a-6(e)

Rule 17a-4 sets forth record preservation requirements applicable to broker-dealers, including broker-dealers also registered as SBSDs or MSBSPs.¹⁵⁹

Rule 18a-6 sets forth record preservation requirements applicable to SBS Entities that are not dually registered as broker-dealers.¹⁶⁰ The Commission is proposing to amend Rules 17a-4(f)¹⁶¹ and 18a-6(e),¹⁶² which prescribe requirements for broker-dealers and SBS Entities, respectively, that elect to preserve records electronically to comply with the record preservation requirements of Rules 17a-4 and 18a-6, respectively.

The proposed amendments to Rule 17a-4(f) would add the audit-trail alternative to the current WORM requirement.¹⁶³ The amendments to Rule 18a-6(e) would add a requirement that electronic recordkeeping systems used by nonbank SBS Entities to comply with the record preservation requirements of Rule 18a-6 must meet either the audit-trail or WORM requirement.¹⁶⁴

Rule 17a-4(f) currently requires a broker-dealer to store separately from

the original, on any medium acceptable under Rule 17a-4, a duplicate copy of a record for the requisite time period. Similarly, Rule 18a-6(e) currently requires that an SBS Entity store separately from the original a duplicate copy of a record stored on the electronic storage system for the requisite time period. These current provisions require broker-dealers and SBS Entities to maintain a second copy of a record. The Commission is proposing amendments to both of these paragraphs to require the broker-dealer and the SBS Entity to have a backup set of records when records are preserved on an electronic recordkeeping system.¹⁶⁵ Under the proposal, the broker-dealer or SBS Entity would need to have a second electronic recordkeeping system.

Rule 17a-4(f) currently requires that, for every broker-dealer exclusively using electronic storage media for some or all of its record preservation, at least one third party, who has access to and the ability to download information from the broker-dealer’s electronic storage media to any acceptable medium under Rule 17a-4, must file with the DEA for the broker-dealer certain undertakings that the third party will provide access to the broker-dealer’s electronic records and provide them to the Commission and other securities regulators if requested. The proposed amendments to Rule 17a-4(f) would eliminate the third-party access and undertakings requirements and replace them with a requirement that a senior officer of the broker-dealer have the access and provide the necessary undertakings.¹⁶⁶ Rule 18a-6(e) currently does not have third-party access and undertakings requirements; the proposed amendments to the rule would add senior officer access and undertakings requirements analogous to that of Rule 17a-4(f), as proposed to be amended.¹⁶⁷

The Commission is proposing to no longer impose the requirements for electronic recordkeeping systems in paragraph (e)(2) of Rule 18a-6, as proposed to be amended, on bank SBS Entities.¹⁶⁸ However, the other provisions of paragraph (e) of Rule 18a-6, as proposed to be amended, would continue to apply to all SBS Entities.

The Commission is proposing to move the requirements for broker-dealers using micrographic media to new

¹⁵⁸ See 5 CFR 1320.11(l).

¹⁵⁹ See 17 CFR 240.17a-4. As stated above, the term “broker-dealer” for the purposes of this release includes broker-dealers that are also registered as SBSDs or MSBSPs.

¹⁶⁰ See 17 CFR 240.18a-6. As stated above, the term “SBS Entity” for the purposes of this release refers to SBSDs and MSBSPs that are not also registered as broker-dealers.

¹⁶¹ See Rule 17a-4(f) (setting forth the electronic record preservation requirements for broker-dealers).

¹⁶² See Rule 18a-6(e) (setting forth the electronic record preservation requirements for SBS Entities).

¹⁶³ See section II.D. of this release (discussing these proposed amendments).

¹⁶⁴ As defined above, the term “nonbank SBS Entity” refers to an SBS Entity that does not have a prudential regulator and the term “bank SBS Entity” refers to an SBS Entity that has a prudential regulator.

¹⁶⁵ See section II.E. of this release (discussing these proposed amendments).

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ See section II.D. of this release (discussing these proposed amendments).

¹⁵⁶ See 44 U.S.C. 3501 *et seq.*

¹⁵⁷ See 44 U.S.C. 3507; 5 CFR 1320.11.

paragraph (f)(4) of Rule 17a-4.¹⁶⁹ Rule 18a-6(e) does not provide for retaining records using micrographic media.

The proposed amendments to Rule 17a-4(f) would eliminate a requirement that the broker-dealer notify its DEA before employing an electronic recordkeeping system.¹⁷⁰ Rule 18a-6(e) currently does not have a similar DEA notification requirement.

2. Proposed Amendments to Rules 17a-4(j) and 18a-6(g)

Rule 17a-4(j) requires broker-dealers to furnish promptly to the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 17a-4 or any other record of the firm that is subject to examination under Section 17(b) of the Exchange Act.¹⁷¹ Rule 18a-6(g) requires SBS Entities to furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the firm that are required to be preserved under Rule 18a-6, or any other records of the firm subject to examination or required to be made or maintained pursuant to Section 15F of the Exchange Act.¹⁷²

The Commission is proposing to amend the prompt production of records requirements of Rules 17a-4(j) and 18a-6(g).¹⁷³ The proposed amendments to Rules 17a-4(j) and 18a-6(g) would require a broker-dealer or SBS Entity, respectively, to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to Rules 17a-4(f) and 18a-6(e), respectively, in a reasonably usable electronic format, if requested by a representative of the Commission.¹⁷⁴

B. Proposed Use of Information

The requirements of Rules 17a-4 and 18a-6, and the proposed amendments to these rules, are designed, among other things, to promote the prudent operation of broker-dealers and SBS Entities and to assist the Commission, SROs, and state securities regulators in conducting effective examinations.¹⁷⁵

¹⁶⁹ See section II.F. of this release (discussing these proposed amendments).

¹⁷⁰ See section II.C. of this release (discussing these proposed amendments).

¹⁷¹ See Rule 17a-4(j) (setting forth the prompt production of records requirements for broker-dealers); 15 U.S.C. 78q(b).

¹⁷² See Rule 18a-6(g) (setting forth the prompt production of records requirements for SBS Entities); 15 U.S.C. 78o-10(f).

¹⁷³ See section II.G. of this release (discussing these proposed amendments).

¹⁷⁴ See Rule 17a-4(j) and Rule 18a-6(g), as proposed to be amended.

¹⁷⁵ See, e.g., *Books and Records Requirements for Brokers and Dealers Under the Securities Exchange*

The proposed amendments to Rules 17a-4(j) and 18a-6(g) are designed to facilitate examinations and other regulatory reviews by making them more efficient. Taken as a whole, the collections of information under the proposed amendments to Rules 17a-4(f), 18a-6(e), 17a-4(j), and 18a-6(g) would promote the prudent operation of broker-dealers and SBS Entities and facilitate the examinations of broker-dealers and SBS Entities by the Commission, SROs, and state securities regulators.

C. Respondents

As of December 31, 2020, there were 3,551 broker-dealers registered with the Commission.¹⁷⁶ As of November 9, 2021, 41 SBSDs have registered with the Commission, while no MSBSPs have registered with the Commission.¹⁷⁷ Six of the SBSDs are existing broker-dealers or will be broker-dealers and, therefore, are included in the 3,551 broker-dealers. Nine of the SBSDs are applying substituted compliance with respect to the requirements of Rule 18a-6(e).¹⁷⁸ One SBSD is using the alternative compliance mechanism of Exchange Act Rule 18a-10 and, therefore, is complying with the CFTC's recordkeeping rules.¹⁷⁹ This leaves 25 SBSDs that are subject to Rule 18a-6(e) and, therefore, would be subject to the proposed amendments to that rule. Twenty-one of these SBSDs have a prudential regulator. This leaves four SBSDs that would be subject to paragraph (e)(2) of Rule 18a-6. Finally, 24 of the 25 SBSDs subject to Rule 18a-6(e) are also registered with the CFTC as swap dealers.

The following table summarizes the estimated number of respondents that would be subject to the amendments to Rule 17a-4(f) and the number of SBSDs that would be subject to the amendments to Rule 18a-6(e) and paragraph (e)(2) of Rule 18a-6.

Act of 1934, Exchange Act Release No. 44992 (Oct. 26, 2001), 66 FR 55818 (Nov. 2, 2001) ("The Commission has required that broker-dealers create and maintain certain records so that, among other things, the Commission, [SROs], and State Securities Regulators . . . may conduct effective examinations of broker-dealers" (footnote omitted)).

¹⁷⁶ This estimate is derived from broker-dealer FOCUS filings as of December 31, 2020, as described in greater detail in the economic baseline, and is inclusive of five OTC derivatives dealers affected by the proposed amendments.

¹⁷⁷ See *List of Registered Security-Based Swap Dealers and Major Security-Based Swap Participants*, available at: <https://www.sec.gov/tm/List-of-SBS-Dealers-and-Major-SBS-Participants>.

¹⁷⁸ See *Substituted Compliance Notices*, available at: <https://www.sec.gov/tm/Substituted-compliance-Notices>.

¹⁷⁹ See 17 CFR 240.18a-10.

Type of registrant	Number
Broker-dealers (including SBSDs dually registered as broker-dealers)	3,551
SBSDs that would be subject to Rule 18a-6(e) as proposed to be amended	25
SBSDs that would be subject to Rule 18a-6(e)(2) as proposed to be amended ..	4

Based upon the recent experience of the staff, the Commission estimates that approximately 95% of the broker-dealers, including broker-dealers that will be dually registered as SBS Entities, (*i.e.*, 3,373 broker-dealers) use electronic recordkeeping systems; all of these firms are expected to continue to use electronic recordkeeping systems pursuant to the requirements of Rule 17a-4(f), as proposed to be amended. The Commission believes that all SBSDs that are subject to Rule 18a-6(e) (25 SBSDs) use electronic recordkeeping systems pursuant to the requirements of Rule 18a-6(e) and would continue to do so under the proposed amendments.

D. Total Initial and Annual Reporting Burdens

1. Proposed Amendments to Rules 17a-4(f) and 18a-6(e)

Rules 17a-4(f) and 18a-6(e) currently impose collection of information requirements that result in initial and annual time burdens for broker-dealers and SBSDs. The proposed amendments to these rules would both add to and decrease the current time burden estimates as explained below.

The proposed amendments to Rule 17a-4(f) would provide an audit-trail alternative to the current WORM requirement for electronic recordkeeping systems used by broker-dealers to meet the record preservation requirements of Rule 17a-4.¹⁸⁰ Consequently, broker-dealers could continue to meet the requirements of the rule by using a WORM-compliant electronic recordkeeping system they employ today. The amendments to Rule 18a-6(e) would add a requirement that electronic recordkeeping systems used by nonbank SBSDs to comply with the record preservation requirements of Rule 18a-6 must meet either the audit-trail or WORM requirement.¹⁸¹

The Commission believes that few, if any, broker-dealers or nonbank SBSDs that use electronic recordkeeping systems are not currently compliant with the rules, as proposed to be amended, either because they currently

¹⁸⁰ See section II.D. of this release (discussing these proposed amendments).

¹⁸¹ *Id.*

use an electronic recordkeeping system that meets the WORM requirement or that could meet the proposed audit-trail requirement. Indeed, the Commission believes that some broker-dealers and nonbank SBSDs are using a modern, audit-trail compliant electronic recordkeeping system for their own business purposes while simultaneously maintaining a WORM-compliant system solely for the purpose of complying with the requirements of Rule 17a-4(f).

A broker-dealer that does not preserve records electronically would incur initial costs to build an electronic recordkeeping system that meets either the WORM requirement or the audit-trail requirement or would have the initial burden of hiring a vendor to provide the service. A broker-dealer that preserves records electronically using a WORM-compliant electronic recordkeeping system would have an initial burden to build an electronic recordkeeping system that meets the audit-trail requirement, if it elects to use that alternative. An SBSD would have an initial burden to build an electronic recordkeeping system that meets either the WORM requirement or the audit-trail requirement or would have the initial burden of hiring a vendor to provide the service. Similarly, on an ongoing basis, the broker-dealer or SBSD would be required to expend financial or human resources to maintain their recordkeeping systems to comply with the proposed audit-trail or WORM requirements.

Based upon information provided to the Commission by the securities industry, the Commission estimates that the initial cost to build and implement a WORM-compliant electronic recordkeeping system for a large broker-dealer is \$10 million, with an additional cost of \$1.2 million annually to maintain the system.¹⁸² Based on feedback from the securities industry, the Commission believes that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirements and the ongoing cost to maintain the system would be substantially lower than the analogous costs that would be incurred with respect to a WORM-compliant system.¹⁸³ Consequently, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for a large broker-dealer is \$1,000,000, with an additional cost of \$120,000 annually

to maintain the system. There are 802 broker-dealers with assets greater than \$10 million and there are four SBSDs that would be subject to paragraph (e)(2) of Rule 18a-6. The Commission does not believe any of these firms will elect to build a WORM-compliant electronic recordkeeping system. Moreover, the Commission estimates that most of these firms have electronic recordkeeping systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system. The Commission estimates that 20 of these firms would elect to build a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$20,000,000 and an annual cost burden of \$2,400,000.

The Commission estimates that the cost for the 2,749 broker-dealers with \$10,000,000 or less in total assets to build and maintain an electronic recordkeeping system that meets the proposed audit-trail requirement would be significantly less than the \$1,000,000 initial and \$120,000 annual costs estimated for the 802 larger broker-dealers and the four SBSDs that would be subject to paragraph (e)(2) of Rule 18a-6. Consequently, the Commission estimates that the initial cost to build and implement an electronic recordkeeping system that meets the audit-trail requirement for these smaller broker-dealers is \$100,000, with an additional cost of \$12,000 annually to maintain the system. The Commission estimates that most of the 2,749 broker-dealers with \$10,000,000 or less in total assets will continue to preserve records in the manner they do today: Using a WORM-compliant system, using micrographic media, or maintaining paper records. The Commission estimates that 80 of these firms would elect to build a new electronic recordkeeping system to meet the audit-trail requirement for an initial one-time industry cost burden of \$8,000,000 and an annual cost burden of \$960,000.

The Commission believes that broker-dealers and SBSDs would incur an initial burden and ongoing annual burden in establishing a backup electronic recordkeeping system. The Commission believes these burdens and costs would be substantially less than the burdens and costs of the primary electronic recordkeeping systems because of the benefit of economies of scale for the backup system whereby common technology and personnel could be used for both systems. The Commission estimates that the costs and burdens for the 802 larger broker-dealers and the four SBSDs that would be

subject to paragraph (e)(2) of Rule 18a-6 would be \$250,000 in initial burdens and costs and \$30,000 in annual burdens and costs. Further, the Commission expects that the broker-dealers and SBSDs that have electronic recordkeeping systems that could meet the audit-trail requirement or that could be configured to meet that requirement without the need to build a new system also maintain backup recordkeeping systems for business continuity purposes. Therefore, the initial and annual costs would be incurred by the 20 firms that elect to build a new electronic recordkeeping system that meets that proposed audit-trail requirement. Consequently, the Commission estimates that the industry-wide costs and burdens for these firms would be \$5,000,000 in initial costs and burdens and \$600,000 in annual costs and burdens.

The Commission estimates that the costs and burdens incurred by the 80 smaller broker-dealers that would build electronic recordkeeping systems to meet the audit-trail requirement and, therefore, need to build a backup recordkeeping system, would be substantially less than the costs and burdens incurred by the larger broker-dealers. The Commission estimates that these firms would incur an initial costs and burdens of \$25,000 and ongoing annual costs and burdens of \$3,000. Therefore, the Commission estimates that the industry-wide costs and burdens for these firms would be \$2,000,000 in initial costs and burdens and \$240,000 in ongoing annual costs and burdens.

The proposed amendments to Rule 17a-4(f) would eliminate the third-party access and undertakings requirements and replace them with a requirement that a senior officer of the broker-dealer have the access and provide the necessary undertakings. Based on the Commission's most recent information submitted to the OMB in connection with the renewal of Rule 17a-4, this would result in an estimated elimination of an annual cost of less than \$5,000 that the broker-dealer must incur in paying a third party to agree to perform this service. Rule 18a-6(e) does not contain a third-party undertakings requirement; however, the proposed amendments to the rule would add senior officer access and undertakings requirements analogous to that of Rule 17a-4(f), as proposed to be amended.¹⁸⁴

¹⁸² See Rule 17a-4(f) Rulemaking Petition Addendum at 4-5.

¹⁸³ See e.g. Rule 17a-4(f) Rulemaking Petition at 6-7.

¹⁸⁴ As noted above, paragraph (f) of Rule 18a-6 currently includes a requirement that if the records required to be maintained and preserved by the SBS Entity (whether electronic or otherwise) are prepared or maintained by a third party on behalf of the SBS Entity, the third party must file

The Commission believes that the change, in the case of broker-dealers, from a third party to a senior officer requirement and, in the case of SBSs, the addition of a senior officer requirement, would result in a one-time initial burden of one hour per firm, for a total of 3,373 hours for an initial cost of \$1,676,381 under Rule 17a-4(f) and 25 hours for an initial cost of \$12,425 for SBSs under Rule 18a-6(e).¹⁸⁵ The Commission also believes that the senior officer requirement would add an annual burden of one hour per firm, for a total of 3,373 hours for broker-dealers collectively¹⁸⁶ for a total ongoing cost of \$1,676,381, and 25 hours for a total ongoing cost of \$12,425 for SBSs collectively.¹⁸⁷

The proposed amendments would move existing requirements for broker-dealers using micrographic media from paragraph (f)(3)(i) of Rule 17a-4 to proposed new paragraph (f)(4) of Rule 17a-4, but do not change the substantive requirements. The proposed amendments do not propose a micrographic media alternative for SBS Entities for the reasons described above. The Commission does not believe the proposed amendments relating to micrographic media would have any impact on the burden experienced by broker-dealers.

The Commission anticipates that eliminating the application of paragraph (e)(2) of Rule 18a-6 to the 21 SBSs that have a prudential regulator and are subject to Rule 18a-6 would result in a decrease of 100 hours per firm on an annual basis, or 2,100 hours per year for all firms affected by the proposed amendment, for an ongoing cost savings

undertakings with the Commission. See paragraph (f) of Rule 18a-6.

¹⁸⁵ Throughout this section, to monetize the internal costs the Commission staff used data from the SIFMA publications, Management and Professional Earnings in the Securities Industry—2013, and Office Salaries in the Securities Industry—2013, modified by the Commission staff to account for an 1800 hour work-year and multiplied by 5.35 (professionals) or 2.93 (office) to account for bonuses, firm size, employee benefits and overhead. These figures have been adjusted for inflation through the end of 2020 using data published by the Bureau of Labor Statistics.

One-time initial cost for broker-dealers: 3,373 hours × \$497 per hour (at the controller hourly rate) = \$1,676,381. One time initial cost for SBSs: 25 hours × \$497 per hour (at the controller hourly rate) = \$12,425.

¹⁸⁶ The Commission believes that while the existing third-party requirement is an external burden, the proposed senior officer requirement would be an internal burden required to be accounted for in this section.

¹⁸⁷ Ongoing cost for broker-dealers: 3,373 hours × \$497 per hour (at the controller hourly rate) = \$1,676,381. Ongoing cost for SBSs: 25 hours × \$497 per hour (at the controller hourly rate) = \$12,425.

of \$663,000 per year for all affected firms.¹⁸⁸

Finally, based upon information provided to the Commission from FINRA staff, the Commission believes that the elimination of the DEA notification requirement would decrease the industry-wide burden of compliance by one hour per broker-dealer submitting the notice to its DEA, or approximately 433 hours per year, for an ongoing cost savings of \$136,828¹⁸⁹ per year for the industry.

2. Proposed Amendments to Rules 17a-4(j) and 18a-6(g)

The proposed amendments to Rules 17a-4(j) and 18a-6(g) would require a broker-dealer or SBS Entity, respectively, to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to Rules 17a-4(f) and 18a-6(g), respectively, in a reasonably usable electronic format, if requested by a representative of the Commission. The Commission does not believe that these proposed amendments will change the initial or annual hourly burden for broker-dealers or SBS Entities. The Commission solicits comment on what the estimated initial and annual burden is for broker-dealers and SBS Entities to comply with current versions Rule 17a-4(j) and Rule 18a-6(g) and for those firms to comply with those rules, as proposed to be amended.

E. Collection of Information Is Mandatory

The collections of information pursuant to the proposed amendments are mandatory, as applicable, for broker-dealers and SBS Entities.

F. Confidentiality of Responses to Collection of Information

A broker-dealer or SBS Entity requested by the Commission to produce records retained electronically pursuant to the requirements of Rules 17a-4 or 18a-6 can request confidential treatment of the information.¹⁹⁰ If such confidential treatment request is made, the Commission anticipates that it will keep the information confidential subject to applicable law.¹⁹¹

¹⁸⁸ 2,100 hours × \$316 per hour (at the compliance manager rate) = \$663,000.

¹⁸⁹ 433 hours × \$316 per hour (at the compliance manager rate) = \$136,828.

¹⁹⁰ See 17 CFR 200.83. Information regarding requests for confidential treatment of information submitted to the Commission is available on the Commission's website at <http://www.sec.gov/foia/howfo2.htm#privacy>.

¹⁹¹ See, e.g., 5 U.S.C. 552 et seq.; 15 U.S.C. 78x (governing the public availability of information obtained by the Commission).

G. Retention Period for Recordkeeping Requirements

Rule 17a-4, as proposed to be amended, specifies the required retention periods for records required to be made and preserved by a broker-dealer, whether electronically or otherwise.¹⁹² Rule 18a-6, as proposed to be amended, specifies the required retention periods for records required to be made and preserved by an SBS Entity, whether electronically or otherwise.¹⁹³ Many of the required records must be retained for three years; certain other records must be retained for longer periods.¹⁹⁴

H. Request for Comments

Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission solicits comment on the proposed collections of information in order to:

- Evaluate whether the proposed collections of information are necessary for the proper performance of the functions of the Commission, including whether the information would have practical utility;
- Evaluate the accuracy of the Commission's estimates of the burden of the proposed collections of information;
- Determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected; and

- Evaluate whether there are ways to minimize the burden of the collection of information on those who respond, including through the use of automated collection techniques or other forms of information technology.

Persons submitting comments on the collection of information requirements should direct them to the Office of Management and Budget, Attention: Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Washington, DC 20503, and should also send a copy of their comments to Vanessa A. Countryman, Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090, with reference to File Number S7-19-21. Requests for materials submitted to OMB by the Commission with regard to this collection of information should be in writing, with reference to File Number S7-19-21 and be submitted to the Securities and Exchange Commission, Office of FOIA/PA Services, 100 F Street NE, Washington, DC 20549-2736. As OMB is required to make a decision

¹⁹² See Rule 17a-4, as proposed to be amended.

¹⁹³ See Rule 18a-6, as proposed to be amended.

¹⁹⁴ See Rules 17a-4 and 18a-6, as proposed to be amended.

concerning the collections of information between 30 and 60 days after publication, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

VI. Initial Regulatory Flexibility Act Analysis

A. Reasons for, and Objectives of, the Proposed Action

The proposed amendments to Rules 17a-4 and 18a-6 are designed to modernize the electronic recordkeeping requirements for broker-dealers and SBS Entities, and to align the requirements in those rules more closely to the current electronic recordkeeping practices of broker-dealers and SBS Entities. As discussed in greater detail above, the amendments to Rule 17a-4 would provide an audit-trail alternative to the current requirement that broker-dealer electronic records be preserved exclusively in a non-rewriteable, non-erasable format. The audit-trail alternative would require that the electronic records be preserved in a manner that permits the recreation of an original record if it is altered, over-written, or erased. Rule 18a-6, which applies to SBS Entities, currently does not have a requirement to preserve electronic records: (1) In a manner that permits the recreation of an original record if it is altered, over-written or erased; or (2) exclusively in a non-rewriteable, non-erasable format. The amendments to Rule 18a-6 would require an SBS Entity without a prudential regulator that preserves records electronically to meet one of these two requirements. The Commission believes that the amendments will save many broker-dealers and SBS Entities from the burden of maintaining two sets of parallel records: one for business purposes, preserved in a manner that would fulfill the audit-trail alternative requirements that the Commission is proposing, and another set of records that is preserved in a non-rewriteable, non-erasable method in order to comply with the current requirements of 17a-4(f).

The proposed amendments also would eliminate the third-party access and undertakings requirements and replace them with a requirement that a senior officer of the broker-dealer provide the access and undertakings. The Commission preliminarily believes that the existing third-party access and undertakings requirements are outdated in light of the changed technological environment and that providing a third party access to electronic recordkeeping

systems and customer information needlessly exposes firms to data leakage and cybersecurity threats. The Commission preliminarily believes replacing the third-party access and undertakings requirements with a requirement that a senior officer provide access and the undertakings would address cybersecurity and trade-secret concerns about requiring a third party to fulfill this responsibility.

In addition, the amendments would add a requirement to Rule 17a-4(j) and 18a-6(g) that a broker-dealer or SBS Entity, respectively, furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant Rules 17a-4(f) and 18a-6(g), respectively, in a reasonably usable electronic format, if requested by a representative of the Commission. The Commission believes that the production of records in a reasonably usable electronic format would facilitate examinations and other regulatory reviews by making them more efficient.

The amendments to Rule 17a-4 also would eliminate a requirement that the broker-dealer notify its DEA before employing an electronic recordkeeping system. The Commission preliminarily believes this requirement is no longer necessary because the rule was adopted at a time when the use of electronic recordkeeping systems by broker-dealers to meet the record preservation requirements of Rule 17a-4 was a relatively new phenomenon, and the staff of DEAs, including FINRA, now have substantial experience and familiarity with the topic.

Finally, the amendments to both rules would remove or replace text to make them more technology neutral and to improve readability.

B. Legal Basis

Pursuant to Exchange Act Section 17, 15 U.S.C. 78q the Commission is proposing to revise § 240.17a-4(f) and (j) and § 240.18a-6(e) and (g) of title 17 of the Code of Federal Regulations.

C. Small Entities Subject to the Proposed Rules

As discussed above, the Commission estimates that approximately 3,551 broker-dealers and 25 SBSs that are not broker-dealers would be subject to the new electronic recordkeeping requirements as a result of the amendments to Rules 17a-4(f) and (j) and to Rules 18a-6(e) and (g), respectively. For purposes of this Regulatory Flexibility Act (“RFA”) analysis, the Commission refers to broker-dealers that might be deemed

small entities under the RFA as “small entities.”

Based on FOCUS Report data, the Commission estimates that as of June 30, 2021, approximately 1,439 of those broker-dealers might be deemed small entities for purposes of this analysis. Based upon the Commission’s prior RFA certification that adoption of Rule 18a-6 would not have a significant economic impact on a substantial number of small entities for the purposes of the RFA,¹⁹⁵ the Commission believes that no small entities will be affected by the proposed amendments to Rule 18a-6.

D. Reporting, Recordkeeping, and Other Compliance Requirements

The RFA requires a description of the projected reporting, recordkeeping, and other compliance requirements of the proposed amendments to Rules 17a-4(f) and (j) and Rules 18a-6(e) and (g), including an estimate of the classes of small entities that would be subject to the requirements and the type of professional skill necessary to prepare required reports and records. Following is a discussion of the associated costs and burdens of compliance with the proposed amendments, as incurred by small entities.¹⁹⁶

The Commission does not believe that the compliance costs of the proposed amendments would be significant. The Commission believes that the proposed audit-trail alternative to preserving electronic records would be consistent with existing broker-dealer practices. Broker-dealers have explained to the Commission that the electronic recordkeeping systems used for business purposes are dynamic and updated constantly (e.g., with each new transaction or position) and easily accessible for retrieving records. The Commission believes that these contemporary electronic recordkeeping business systems, in many cases, can be configured to meet the audit-trail requirement in Rule 17a-4(f), as proposed to be amended. Moreover, small broker-dealers could continue to preserve records on electronic recordkeeping systems that meet the WORM requirement.

The proposed replacement of the required third-party access and undertakings requirements in Rule 17a-4(f) with a requirement that a senior officer of the broker-dealer have the access and make the required undertakings should reduce the burden

¹⁹⁵ See SBS/MSBSP Recordkeeping Adopting Release, 84 FR at 68645.

¹⁹⁶ See section V.D.1, above (describing costs for smaller broker-dealers, which could include broker-dealers that are small entities).

on small broker-dealers because they will be able to use an internal resource at no marginal cost rather than an external source to comply with the requirement.

The proposed amendments to Rule 17a-4(j) that would require a broker-dealer to furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant Rule 17a-4(f) in a reasonably usable electronic format, if requested by a representative of the Commission, should not impose a burden on small entities.

E. Duplicative, Overlapping, or Conflicting Federal Rules

The Commission does not believe that the proposed amendments impacting smaller entities that are broker-dealers would duplicate, overlap, or conflict with other Federal Rules.

F. Significant Alternatives

The RFA directs the Commission to consider significant alternatives that would accomplish its stated objective, while minimizing any significant economic impact on small entities. The Commission considered the following alternatives for small entities in relation to our proposal: (1) Exempting broker-dealers that are small entities from the proposed requirements, to account for resources available to small entities; (2) establishing different requirements, including frequency, to account for resources available to small entities; (3) clarifying, consolidating, or simplifying the compliance requirements under the proposal for small entities; and (4) using performance rather than design standards.

The Commission considered exempting broker-dealers that are small entities from the proposal and considered establishing different requirements for these firms.¹⁹⁷ However, the Commission elected not to do so for a number of reasons, including: (1) The option for small entities to keep their records in paper or micrographic media, rather than electronically; (2) the importance of establishing requirements for reliable and secure electronic recordkeeping systems for broker-dealers; (3) the availability of multiple third-party vendors to provide the electronic recordkeeping services; and (4) the ability of small entities to continue to use existing WORM-compliant electronic recordkeeping systems.

¹⁹⁷ As stated above, the Commission does not believe any SBS Entities qualify as “small entities” for the purposes of the RFA.

In this vein, the Commission considered proposing the elimination of the WORM alternative and requiring all broker-dealers and nonbank SBS Entities to comply with an audit-trail requirement. This alternative would require all affected entities to modernize their recordkeeping systems to meet the audit-trail requirement. While this alternative could produce long-term compliance efficiencies for a greater number of affected participants, it would also require all affected entities with WORM-compliant systems to upgrade their electronic recordkeeping systems. The Commission elected not to propose this alternative given its preliminary belief that the accompanying compliance costs could be particularly burdensome for smaller entities and that the alternative could have a disproportionate effect on smaller and medium-sized broker-dealers.¹⁹⁸

1. The Commission also considered simplifying compliance by proposing performance rather than design standards similar to the approach taken by the CFTC. The CFTC amended the electronic recordkeeping requirements by replacing prescriptive requirements for electronic recordkeeping systems with a principles-based approach.¹⁹⁹ The Commission believes that its proposed rule amendments, establishing electronic recordkeeping requirements for broker-dealers should provide greater protection to the original records created and preserved by broker-dealers, thereby giving regulators more reliable and secure access to those records. Unlike the CFTC’s rules, the Commission’s proposal retains the WORM standard, which requires electronic records to be maintained exclusively in a non-rewriteable, non-erasable format. The audit-trail alternative would require that the electronic records be preserved in a manner that permits the recreation of an original record if it is altered, overwritten, or erased. Moreover, the Commission believes that its proposal addresses the same concerns addressed in the CFTC proposal, namely the security and authenticity of and access to records.²⁰⁰ For these reasons, the Commission determined not to propose principles-based rules.

¹⁹⁸ See section IV.D. of this release (analyzing the potential costs of alternatives to the rule amendments the Commission is proposing).

¹⁹⁹ See CFTC Electronic Recordkeeping Release, 82 FR at 24480.

²⁰⁰ Compare Rule 17a-4(f), as proposed to be amended, and Rule 18a-6(e), as proposed to be amended, with CFTC Section 1.31(d)(2).

G. Request for Comment

The Commission encourages the submission of comments with respect to any aspect of this initial RFA analysis. In particular, the Commission requests comment regarding:

1. Whether there are more efficient or less burdensome ways for the Commission to modernize the electronic recordkeeping requirements for registrants compared to what the Commission has proposed;
2. The number of small entities that may be affected by the proposed rule amendments; and
3. Whether there are any Federal rules that duplicate, overlap, or conflict with the proposed amendments.

VII. Small Business Regulatory Enforcement Fairness Act

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996 (“SBREFA,”)²⁰¹ the Commission must advise the OMB as to whether the proposed regulation constitutes a “major” rule. Under SBREFA, a rule is considered “major” where, if adopted, it results or is likely to result in:

- An annual effect on the economy of \$100 million or more (either in the form of an increase or a decrease);
- A major increase in costs or prices for consumers or individual industries; or
- Significant adverse effect on competition, investment or innovation.

If a rule is “major,” its effectiveness will generally be delayed for 60 days pending Congressional review.

The Commission requests comment on the potential impact of the amendments to Rules 17a-5(f) and (j) and Rules 18a-6(e) and (g) on:

1. The U.S. economy on an annual basis,
 2. Any potential increase in costs or prices for consumers or individual industries, and
 3. Any potential effect on competition, investment, or innovation.
- Commenters are requested to provide empirical data and other factual support for their view to the extent possible.

VIII. Statutory Authority

The Commission is revising Rules 17a-4 and 18a-6 under the Exchange Act (17 CFR 240.17a-4 and 17 CFR 240.18a-6) pursuant to the authority conferred by the Exchange Act, including Sections 15F and 17.

²⁰¹ Public Law 104-121, Title II, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C., 15 U.S.C. and as a note to 5 U.S.C. 601).

List of Subjects in 17 CFR Part 240

Brokers, Confidential business information, Fraud, Reporting and recordkeeping requirements, Securities.

Text of Rule Amendments

For the reasons set out in the preamble, the Commission is proposing to amend title 17, chapter II of the Code of Federal Regulations 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, 78k, 78k-1, 78l, 78m, 78n, 78n-1, 78o, 78o-4, 78o-10, 78p, 78q, 78q-1, 78s, 78u-5, 78w, 78x, 78dd, 78ll, 78mm, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4, 80b-11, and 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 240.17a-4 also issued under secs. 2, 17, 23(a), 48 Stat. 897, as amended; 15 U.S.C. 78a, 78d-1, 78d-2; sec. 14, Pub. L. 94-29, 89 Stat. 137 (15 U.S.C. 78a); sec. 18, Pub. L. 94-29, 89 Stat. 155 (15 U.S.C. 78w);

* * * * *

■ 2. Amend § 240.17a-4 by revising paragraphs (f) and (j) to read as follows:

§ 240.17a-4 Records to be preserved by certain exchange members, brokers and dealers.

* * * * *

(f) The records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 may be immediately produced or reproduced by means of an electronic recordkeeping system or by means of micrographic media subject to the conditions set forth in this paragraph and be maintained and preserved for the required time in that form.

(1) For purposes of this paragraph,

(i) The term micrographic media means microfilm or microfiche, or any similar medium; and

(ii) The term electronic recordkeeping system means a system that preserves records in a digital format and that requires a computer to access the records.

(2) An electronic recordkeeping system must:

(i)(A) Preserve the records for the duration of their applicable retention periods in a manner that maintains a complete time-stamped audit trail that includes:

(1) All modifications to and deletions of a record or any part thereof;

(2) The date and time of operator entries and actions that create, modify, or delete the record;

(3) The individual(s) creating, modifying, or deleting the record; and

(4) Any other information needed to maintain an audit trail of each distinct record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record and interim iterations of the record; or

(B) Preserve the records exclusively in a non-rewriteable, non-erasable format;

(ii) Verify automatically the completeness and accuracy of the processes for storing and retaining records electronically;

(iii) If applicable, serialize the original and duplicate units of the storage media, and time-date for the required period of retention the information placed on such electronic storage media; and

(iv) Have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format and to readily download and transfer the information needed to locate the electronic record, as required by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker or dealer.

(3) A member, broker, or dealer using an electronic recordkeeping system must:

(i) At all times have available, for examination by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker or dealer facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records;

(ii) Be ready at all times to provide, and immediately provide, any record or information needed to locate records stored by means of the electronic recordkeeping system that the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker or dealer may request;

(iii) Maintain a backup electronic recordkeeping system that meets the

other requirements of this paragraph (f) and that retains the records required to be maintained and preserved pursuant to §§ 240.17a-3 and 240.17a-4 in accordance with this section;

(iv) Organize and maintain information necessary to locate records maintained by the electronic recordkeeping system;

(v)(A) Have in place an auditable system of controls that records, among other things: (1) Each input, alteration, or deletion of a record;

(2) The names of individuals inputting, altering, or deleting a record; and

(3) The date and time such individuals input, altered, or deleted the record;

(B) At all times be able to produce a record of the results of the audit of the system of controls for examination by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker or dealer; and

(C) Preserve the record of the results of the audit of the system of controls for the retention period required for the associated records;

(vi) Maintain, keep current, and provide promptly upon request by the staffs of the Commission, the self-regulatory organizations of which the member, broker, or dealer is a member, or any State securities regulator having jurisdiction over the member, broker or dealer all information necessary to access and locate records preserved by means of the electronic recordkeeping system; and

(vii) Have at all times a senior officer of the member, broker, or dealer (hereinafter, the "undersigned"), who has independent access to and the ability to provide records maintained and preserved on the electronic recordkeeping system, file with the designated examining authority for the member, broker or dealer the following undertakings with respect to such records:

The undersigned hereby undertakes to furnish promptly to the U.S. Securities and Exchange Commission ("Commission"), its designees or representatives, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer], upon reasonable request, such information as is deemed necessary by the staff of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer], and to download copies of

a record and its audit trail (if applicable) preserved by means of an electronic recordkeeping system of [Name of the Member, Broker, or Dealer] into both a human readable format and a reasonably usable electronic format in the event of a failure on the part of [Name of the Member, Broker, or Dealer] to download a requested record or its audit trail (if applicable).

Furthermore, the undersigned hereby undertakes to take reasonable steps to provide access to the information preserved by means of an electronic recordkeeping system of [Name of the Member, Broker, or Dealer], including, as appropriate, downloading any record required to be maintained and preserved by [Name of the Member, Broker, or Dealer] pursuant to §§ 240.17a-3 and 240.17a-4 in a format acceptable to the staff of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer]. Specifically, the undersigned will take reasonable steps that, in the event of a failure on the part of [Name of the Member, Broker, or Dealer] to download the record into a human readable format or a reasonably usable electronic format and after reasonable notice to [Name of the Member, Broker, or Dealer], the undersigned will download the record into a human readable format or a reasonably usable electronic format at the request of the staff of the staffs of the Commission, any self-regulatory organization of which [Name of the Member, Broker, or Dealer] is a member, or any State securities regulator having jurisdiction over [Name of the Member, Broker, or Dealer].

(4) A broker-dealer using a micrographic media system must:

(i) At all times have available, for examination by the staffs of the Commission, self-regulatory organizations of which it is a member, and any State securities regulator having jurisdiction over the member, broker or dealer, facilities for immediate, easily readable projection or production of micrographic media and for producing easily readable images;

(ii) Be ready at all times to provide, and immediately provide, any facsimile enlargement which the staffs of the Commission, any self-regulatory organization of which it is a member, or any State securities regulator having jurisdiction over the member, broker or dealer may request;

(iii) Store, separately from the original, a duplicate copy of the record stored on any medium acceptable under § 240.17a-4 for the time required; and

(iv) Organize and index accurately all information maintained on both original and duplicate storage media.

(A) At all times, a member, broker, or dealer must be able to have such indexes available for examination by the staffs of the Commission, the self-

regulatory organizations of which the broker or dealer is a member, and any State securities regulator having jurisdiction over the member, broker or dealer.

(B) Each index must be duplicated and the duplicate copies must be stored separately from the original copy of each index.

(C) Original and duplicate indexes must be preserved for the time required for the indexed records.

* * * * *

(j) Every member, broker and dealer subject to this section must furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the member, broker or dealer that are required to be preserved under this section, or any other records of the member, broker or dealer subject to examination under section 17(b) of the Act (15 U.S.C. 78q(b)) that are requested by the representative of the Commission. The member, broker, or dealer must furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to paragraph (f) of this section in a reasonably usable electronic format, if requested by a representative of the Commission.

* * * * *

■ 3. Amend § 240.18a-6 by revising paragraphs (e) and (g) to read as follows:

§ 240.18a-6 Records to be preserved by certain security-based swap dealers and major security-based swap participants.

* * * * *

(e) The records required to be maintained and preserved pursuant to §§ 240.18a-5 and 240.18a-6 may be immediately produced or reproduced by means of an electronic recordkeeping system subject to the conditions set forth in this paragraph and be maintained and preserved for the required time in that form.

(1) For purposes of this paragraph, the term *electronic recordkeeping system* means a system that preserves records in a digital format and that requires a computer to access the records.

(2) An electronic recordkeeping system of a security-based swap dealer or major security-based swap participant without a prudential regulator must:

(i)(A) Preserve the records for the duration of their applicable retention periods in a manner that maintains a complete time-stamped audit trail that includes:

(1) All modifications to and deletions of a record or any part thereof;

(2) The date and time of operator entries and actions that create, modify, or delete the record;

(3) The individual(s) creating, modifying, or deleting the record; and

(4) Any other information needed to maintain an audit trail of each distinct record in a way that maintains security, signatures, and data to ensure the authenticity and reliability of the record and will permit re-creation of the original record and interim iterations of the record; or

(B) Preserve the records exclusively in a non-rewriteable, non-erasable format;

(ii) Verify automatically the completeness and accuracy of the processes for storing and retaining records electronically;

(iii) If applicable, serialize the original and duplicate units of the storage media, and time-date for the required period of retention the information placed on such electronic storage media; and

(iv) Have the capacity to readily download and transfer copies of a record and its audit trail (if applicable) in both a human readable format and in a reasonably usable electronic format and to readily download and transfer the information needed to locate the electronic record, as required by the staffs of the Commission, or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant.

(3) A security-based swap dealer or major security-based swap participant using an electronic recordkeeping system must:

(i) At all times have available, for examination by the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant, facilities for immediate production of records preserved by means of the electronic recordkeeping system and for producing copies of those records;

(ii) Be ready at all times to provide, and immediately provide, any record or information needed to locate records stored by means of the electronic recordkeeping system that the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant may request;

(iii) Maintain a backup electronic recordkeeping system that meets the other requirements of this paragraph (e), as applicable, and that retains the records required to be maintained and preserved pursuant to §§ 240.18a-5 and 240.18a-6 in accordance with this section;

(iv) Organize and maintain information necessary to locate records maintained by the electronic recordkeeping system; and

(v)(A) Have in place an auditable system of controls that records, among other things: (1) Each input, alteration, or deletion of a record;

(2) The names of individuals inputting, altering, or deleting a record; and

(3) The date and time such individuals input, altered, or deleted the record;

(B) At all times be able to produce a record of the results of the audit of the system of controls for examination by the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant; and

(C) Preserve the record of the results of the audit of the system of controls for the retention period required for the associated records;

(vi) Maintain, keep current, and provide promptly upon request by the staffs of the Commission or any State regulator having jurisdiction over the security-based swap dealer or major security-based swap participant all information necessary to access and locate records preserved by means of the electronic recordkeeping system; and

(vii) Have at all times a senior officer of the security-based swap dealer or major security-based swap participant (hereinafter, the "undersigned"), who has independent access to and the ability to provide records maintained and preserved on the electronic recordkeeping system, file with the Commission the following undertakings with respect to such records:

The undersigned hereby undertakes to furnish promptly to the U.S. Securities and Exchange Commission ("Commission") and its designees or representatives, or any State securities regulator having jurisdiction over [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], upon reasonable request, such information as is deemed necessary by the staff of the Commission or any State regulator having jurisdiction over [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], to download copies of a record and its audit trail (if applicable) preserved by means of an electronic recordkeeping system of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] into both a human readable format and a reasonably usable electronic format in the event of a failure on the part of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] to download a requested record or its audit trail (if applicable).

Furthermore, the undersigned hereby undertakes to take reasonable steps to provide access to the information preserved by means of an electronic recordkeeping system of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant], including, as appropriate, downloading any record required to be maintained and preserved by [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] pursuant to §§ 240.18a-5 and 240.18a-6 in a format acceptable to the staff of the Commission or any State regulator having jurisdiction over [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant]. Specifically, the undersigned will take reasonable steps that, in the event of a failure on the part of [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant] to download the record into a human readable format or a reasonably usable electronic format and after reasonable notice to [Name of the Security-Based Swap

Dealer or Major Security-Based Swap Participant], the undersigned will download the record into a human readable format or a reasonably usable electronic format at the request of the staff of the Commission or any State regulator having jurisdiction [Name of the Security-Based Swap Dealer or Major Security-Based Swap Participant].

* * * * *

(g) Every security-based swap dealer and major security-based swap participant subject to this section must furnish promptly to a representative of the Commission legible, true, complete, and current copies of those records of the security-based swap dealer or major security-based swap participant that are required to be preserved under this section, or any other records of the security-based swap dealer or major security-based swap participant subject to examination or required to be made or maintained pursuant to section 15F of the Act that are requested by a representative of the Commission. The security-based swap dealer and major security-based swap participant must furnish a record and its audit trail (if applicable) preserved on an electronic recordkeeping system pursuant to paragraph (e) of this section in a reasonably usable electronic format, if requested by a representative of the Commission.

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By the Commission.

Dated: November 18, 2021.

Matthew DeLesDernier,

Assistant Secretary.

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