



November 14, 2017

**Submitted via email:** [rule-comments@sec.gov](mailto:rule-comments@sec.gov)

Brent J. Fields  
Secretary  
Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549

Re: **Petition for Rulemaking to Amend Exchange Act Rule 17a-4(f)**

Dear Mr. Fields,

The Securities Industry and Financial Markets Association (“SIFMA”)<sup>1</sup>, the Financial Services Roundtable (“FSR”)<sup>2</sup>, the Futures Industry Association (“FIA”)<sup>3</sup>, International Swaps and

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<sup>1</sup> SIFMA is the voice of the U.S. securities industry. We represent the broker-dealers, banks and asset managers whose nearly 1 million employees provide access to the capital markets, raising over \$2.5 trillion for businesses and municipalities in the U.S., serving clients with over \$18.5 trillion in assets and managing more than \$67 trillion in assets for individual and institutional clients including mutual funds and retirement plans. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit <http://www.sifma.org>.

<sup>2</sup> FSR represents the largest integrated financial services companies providing banking, insurance, payment, investment, and finance products and services to the American consumer. FSR member companies provide fuel for America’s economic engine, accounting for \$54 trillion in managed assets, \$1.1 trillion in revenue and 2.1 million jobs. For more information, visit <http://www.fsroundtable.org>.

<sup>3</sup> FIA is the leading trade organization for the global futures, options and over-the-counter cleared derivatives markets with offices in Washington, DC, London and Singapore. Its mission is to support open, transparent and competitive markets, protect and enhance the integrity of the financial system and promote high standards of professional conduct. FIA’s core constituency consists of firms registered with the Commodity Futures Trading Commission as futures commission merchants (FCM). Many of these FCMs are also registered as broker-dealers with the Securities and Exchange Commission. The primary focus of the association is the global use of exchanges, trading systems and clearing organizations for derivatives transactions. FIA’s members include clearing firms, exchanges, clearinghouses, trading firms and commodities specialists from more than 48 countries, as well as technology vendors, lawyers and other professionals serving the industry.

Derivatives Association (“ISDA”)<sup>4</sup>, and the Financial Services Institute<sup>5</sup> (together, the “Associations”) respectfully petition the Securities and Exchange Commission (“SEC” or “Commission”), pursuant to Rule 192(a) of the Commission’s Rules of Practice, to amend Rule 17a-4 under the Securities Exchange Act of 1934 (“Exchange Act”) (“Petition”). Specifically, the Associations request that the Commission amend Rule 17a-4(f) to no longer require broker-dealers to implement a “non-rewriteable, non-erasable” or “write once, read many” (“WORM”) standard, notify their designated examination authority of their intent to use electronic storage, have an electronic records audit system, and employ a third-party downloader. As described in more detail below, these 20-year old technology-specific rules are obsolete and measurably slowing the pace of securities firms’ adoption of communication technologies that investors are using and requesting.

In place of those outdated requirements, the Associations propose a rigorous retention standard that is technology-neutral and consistent with current approaches to managing and protecting data. A modernized rule will allow firms to take advantage of the most current information management technologies and more effectively secure regulatory records. This proposal would not otherwise affect the description or types of records required to be retained under the Exchange Act nor inhibit prompt access to such records by the SEC or other self-regulatory organizations.<sup>6</sup>

The recent action by the Commodity Futures Trading Commission (“CFTC”) to modernize its electronic storage requirements—by eliminating the antiquated WORM standard and the third-party technical consultant requirements from its own rules—originated from a rule petition, like this one, from several trade associations. The CFTC implemented the WORM requirements in 1999 to be consistent with similar requirements that the SEC had implemented two years earlier. After careful consideration and industry dialogue, the CFTC amended its rules this year to grant regulated entities “greater flexibility regarding the retention and production of all regulatory records under a less-prescriptive, principles-based approach.”<sup>7</sup> Unfortunately, the CFTC amendments provide limited benefit to our members without corresponding rule changes by the SEC. Any entity subject to both the broker-dealer and CFTC recordkeeping requirements must nonetheless maintain required records in WORM format, despite the CFTC rule changes, if those

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<sup>4</sup> Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 875-member institutions from 68 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. More information about ISDA and its activities is available on the Association’s website: [www.isda.org](http://www.isda.org).

<sup>5</sup> The Financial Services Institute (FSI) is an advocacy association comprised of members from the independent financial services industry, and is the only organization advocating solely on behalf of independent financial advisors and independent financial services firms. Since 2004, through advocacy, education and public awareness, FSI has been working to create a healthier regulatory environment for these members so they can provide affordable, objective financial advice to hard-working Main Street Americans. For more information, visit [www.financialservices.org](http://www.financialservices.org).

<sup>6</sup> In any event, as noted below, we understand that regulators (including SEC and FINRA examiners and enforcement staff) do not typically require records to be produced from WORM storage because the information or data is not readily sortable or searchable.

<sup>7</sup> *Recordkeeping*, 82 Fed. Reg. 24,479, at 24,480 (May 30, 2017) (“CFTC Adopting Release”).

records are comingled.

Significantly, with the CFTC's action, broker-dealers are now the only regulated financial service entities, including other SEC registrants, subject to the burdensome and outmoded WORM standard. The Associations urge the SEC to take this opportunity to modernize the broker-dealer recordkeeping requirements to reflect and promote technological advances, and to facilitate regulatory and operational harmonization with CFTC rules and other SEC regulatory regimes.

Recently when speaking about technological advances and innovation, Chair Clayton said, "While this dynamic atmosphere presents challenges, it also provides opportunities for improvements and efficiencies. It is our job as regulators to find these."<sup>8</sup> The SEC's electronic recordkeeping requirements should be reconsidered in light of the countless technological improvements made since Rule 17a-4(f) was implemented 20 years ago.

### **A. Background on SEC WORM Storage Requirements**

The SEC adopted the WORM standard in 1997 as a part of a regulatory release that expressly permitted electronic recordkeeping within certain limited parameters.<sup>9</sup> The Commission's revised Rule 17a-4(f) delineated the conditions under which a broker-dealer could use electronic media to store required records. Although the Commission has issued limited guidance regarding these electronic storage requirements for broker-dealers, it has not otherwise engaged in a substantive review of them in the 20 years since they were implemented.

Notably, in 2001, the Commission specifically considered and rejected WORM storage requirements for investment companies and investment advisers, opting instead for principles-based electronic storage requirements for these entities.<sup>10</sup> The investment company and adviser rules were designed to be technology-neutral and did not include the WORM requirement because the Commission had "not experienced any significant problems with funds or advisers altering stored records."<sup>11</sup> The Commission did not present evidence that there were actually fewer issues with funds and advisers; rather, the Commission simply stated that it had not found any significant issues.

In 2003, at the urging of the industry, the SEC issued an interpretative release expressly stating that a combination of hardware and software controls could be used in lieu of optical disc storage, which was viewed as limiting and outdated.<sup>12</sup> Although the Commission seemingly attempted to make the rule technology-neutral, the release stated that software controls alone (e.g., access controls, audit logs, etc.) were not sufficient because they did not prevent deletion –

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<sup>8</sup> Speech by SEC Chair Jay Clayton at the Economic Club of New York (July 17, 2017), available at <https://www.sec.gov/news/speech/remarks-economic-club-new-york>.

<sup>9</sup> *Reporting Requirements for Brokers or Dealers Under the Securities Exchange Act of 1934*, Exchange Act Release No. 34-38245, 62 Fed. Reg. 6469 (Feb. 12, 1997).

<sup>10</sup> *Electronic Recordkeeping by Investment Companies and Investment Advisers*, Release No. IC-24991 and IA-2945, 66 Fed. Reg. 29,224 (May 30, 2001).

<sup>11</sup> 66 Fed. Reg. 29,224, at n. 7.

<sup>12</sup> *Electronic Storage of Broker-Dealer Records*, Exchange Act Release No. 47806, 68 Fed. Reg. 25,281, Release 34-47,806 (May 12, 2003).

resulting in practical limitations for available storage options.

## **B. Challenges of WORM**

The 20-year old WORM storage requirement continues to challenge broker-dealers. Today, WORM systems are costly, outmoded, and inefficient storage containers used exclusively to meet the rule's requirements.

### *1. Ineffective Business Continuity Plan or Cybersecurity Tool*

Records stored in WORM cannot effectively be used for business continuity planning (“BCP”) or cybersecurity defenses because the nature of these records makes such use of this technology impractical and, in some cases, impossible. 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. Moreover, WORM records are not correlated or programmed to work with customer-facing communications systems that provide records for customers, such as websites, voice response units (“VRUs”), dynamic communication tools, and databases used by representatives to access customer financial records.

WORM storage technology is not suited to handle the backup and recovery needs of dynamic financial institutions that are conducting millions of transactions and real-time communications with customers on a minute-by-minute basis. Firms maintain multiple backup systems, in addition to SEC-required WORM systems, and also deploy failover systems that duplicate records for almost immediate retrieval should a system go down. Some firms have developed internal cloud-based systems that are regionally dispersed to duplicate data in real time and store customer records and activity (e.g., trades, web activities, etc.). Other firms use external providers who develop and create disaster recovery systems with the same framework for restoring information to its state immediately before a disruptive event occurred. WORM storage systems cannot and do not serve in this capacity.

Further, WORM storage systems are not immune to a cyber-attack or any other BCP event. They remain subject to many of the same potential failures and data corruption problems as with any other storage system, including the physical destruction or alteration of the underlying hardware. WORM storage systems were never intended to be a failsafe system that would address cyber incidents or events.

### *2. Ineffective for Dynamic Content*

As discussed above, WORM storage is antiquated and not sufficiently flexible to provide a meaningful storage mechanism for increasingly complex and dynamic regulated records. Although storing electronic communications data—like e-mail 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. The complexity of the source information makes effective

WORM storage costly and difficult.<sup>13</sup>

In simple terms, archiving dynamic data in WORM storage requires firms to create static documents or reports that are comprised of data generated by and from dynamic and interconnected computer systems. This process of compilation—which occurs solely information for WORM storage purposes—is costly, time-consuming, and generates information with less utility. Further, the stored document comprises a snapshot of the actual record at a specific point in time, and it is not intrinsically useful in recreating the record or demonstrating the dynamic nature of the communications in question.<sup>14</sup>

As a result, our 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.

### *3. Competitive Disadvantage*

The WORM storage requirements are hindering innovation in the brokerage industry due to the inordinate amount of resources allocated to the maintenance of these systems and the implementation challenges for new systems. Firms are required to allocate substantial capital to WORM storage technologies that serve a very narrow purpose. These WORM storage expenditures could otherwise be dedicated to solving practical technology issues facing the industry. When adopting its new recordkeeping rules, the CFTC recognized that firms could reallocate resources more effectively without the WORM requirement.<sup>15</sup>

Broker-dealers are now the only U.S.-registered financial institutions that must comply with WORM storage requirements. The divergence in regulatory approaches to electronic recordkeeping results in an unreasonable standard for U.S. broker-dealers in general, and particularly for those engaged in multiple regulated businesses. For example, broker-dealers selling commodities, futures, mutual fund and bank-issued products are subject to multiple overlapping recordkeeping obligations, including the WORM requirement. It is extremely costly and inefficient for firms that cannot separate records in accordance with a rule set, and therefore comingle records that may be governed by multiple regulators (i.e., SEC, CFTC, Federal Reserve, OCC, etc.). As a result, multi-service institutions retain non-broker dealer records in the higher-cost WORM format when they are not otherwise legally required to do so. This difference results in undue regulatory costs and inefficiencies without any benefit to investors and

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<sup>13</sup> With many of these sites customers and third-parties are constantly inputting or adding content to these digital platforms. The content for social media sites, for example, is both interactive and dynamic, with postings real-time and immediate responses by firms. Further, customers interact with financial institutions' web and mobile sites to access new financial technology tools and educational content for investment products and services. These websites include a vast array of interactive and dynamic digital content being generated every minute of the day.

<sup>14</sup> Today, many records, such as web and mobile sites, are dynamically linked to information from other systems (e.g., systems or databases containing trading and market data or portfolio valuation information) and WORM technology captures static information only at a single point in time, and it cannot retain up-to-the-minute information that is capture through BCP dedicated storage systems working in real-time across systems.

<sup>15</sup> 82 Fed. Reg. at 24,485.

consumers. Further, smaller firms may be driven out of the marketplace as increasingly only firms with scale and efficiencies can afford to maintain these antiquated recordkeeping systems.

### **C. Third Party Consultant and Audit System Requirements**

Rule 17a-4 also includes a requirement to hire a “third party...who has access to and the ability to download information” from the broker-dealer’s electronic storage system.<sup>16</sup> Although there is little discussion of this requirement in the proposing or adopting releases, the requirement was presumably adopted to ensure regulator access to systems made unavailable by a catastrophic event or by uncooperative firm management.

Today, the third-party consultant requirement presents a serious cybersecurity threat. Providing unfettered third-party access to firm systems and client information increases data leakage risks. These risks have rapidly escalated, and were not apparent 20 years ago when the WORM rule was adopted.

A third-party downloader is unnecessary today because broker-dealers have internal experts who can access the data whenever necessary and have the controls in place to maintain security. Moreover, the SEC has sufficient means of compelling an uncooperative firm to produce information through subpoenas and other enforcement powers.

In addition to the third-party downloader requirement, Rule 17a-4 also requires firms to maintain an “audit system providing for accountability regarding inputting of records ... to electronic storage media.”<sup>17</sup> This “audit system” requirement is vague and difficult to comply with and, therefore, should also be removed. The CFTC found the audit system requirement in its own rules to be obsolete and therefore eliminated it, yet still required firms to maintain an audit trail, a significantly lower burden on firms, yet effective for determining authenticity of records.<sup>18</sup> The Associations urge the Commission to take similar action.

Finally, the proposed new rule eliminates the requirement for firms to notify their Designated Examining Authority (“DEA”) 90 days in advance of implementing an electronic records system other than optical disc. DEAs understand that financial institutions maintain most records electronically, thus making the notification requirement not only unnecessary, but also burdensome on DEAs.

### **D. Unnecessary Costs**

Implementing and maintaining a WORM storage system is expensive. Our members estimate that the current cost to implement a WORM storage system for a large firm is on average about \$10 million dollars and an additional \$1.2 million annually to maintain the system. These estimates do not include additional internal resources dedicated to these systems, nor do they include ancillary costs of implementing WORM compliance for each new business application or system.

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<sup>16</sup> Rule 17a-4(f)(vii).

<sup>17</sup> Rule 17a-4(f)(v).

<sup>18</sup> 82 Fed. Reg. at 24,485.

For a large firm, the third-party downloader requirement has a clearly defined cost. One vendor charges \$2,000 for initial set-up for each broker-dealer and then charges \$8,000 per year to provide the requisite confirming letter to the SEC. Although these costs are relatively low per firm, across the industry this requirement is costing broker-dealers millions of dollars per year plus internal implementation resources without any apparent benefit to investors.

Further, these ongoing costs will continue to rise as WORM technology ages, legacy systems need to be maintained, and new systems need to be adapted to meet WORM requirements. Again, small firms will likely be disproportionately burdened because of the resources required to adapt new technology to WORM requirements. Many of the original WORM systems were established and programmed on mainframe computers, making them obsolete in the current cloud-computing world. Yet, firms must maintain these outmoded mainframe storage facilities causing cost overruns that place a significant drag on the brokerage industry compared to all other financial services firms.

### **E. Rulemaking Proposal**

For the reasons stated in this Petition, the Associations are petitioning to amend Rule 17a-4(f) to govern electronic recordkeeping standards with principles-based requirements like those applicable to investment advisers, investment companies, transfer agents, and now swap dealers and futures commission merchants. This technology-neutral approach will allow broker-dealers to ensure the integrity of all regulatory records using the latest technology. The proposal also eliminates the third-party downloader, DEA notification, and audit system requirements because they are antiquated and ineffective.

The proposed rule amendment closely aligns with the SEC's investment adviser, investment company and transfer agent rules, as well as those applicable to swap dealers and futures commission merchants under CFTC rules. Having consistent recordkeeping standards across these various types of financial institutions will further enhance the broker-dealers' ability to efficiently comply with recordkeeping rules using the available technology that best fits their business model.

The attached rule amendments are proposed for your consideration and further discussion. The SEC must amend Rule 17a-4(f) to rectify these inadequacies; interpretive or no-action guidance cannot achieve the necessary outcome. A technology-neutral and principles-based rule will continue to preserve the integrity of the records without imposing undue burdens onto broker-dealers. Further, the benefits of the proposed rule amendments should extend to all required records, whenever created. As such, we ask the Commission to confirm that, upon adoption of the proposed amendments to Rule 17a-4, these provisions would apply to existing records as well as records created after the effective date of any amendments.

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We welcome the opportunity to meet with the Commission staff at a mutually agreeable time to discuss this Petition in further detail and to answer any questions the staff may have. Please

contact Melissa MacGregor, Managing Director and Associate General Counsel, SIFMA at 202-962-7300 with any questions or to arrange a meeting with the Associations.

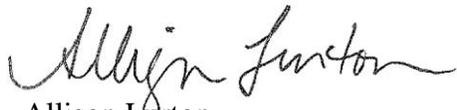
Respectfully submitted,



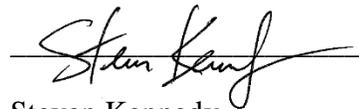
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Attachment

cc: Chair Jay Clayton, SEC  
Commissioner Michael S. Piwowar, SEC  
Commissioner Kara M. Stein, SEC  
Brett Redfearn, Director, Division of Trading and Markets, SEC  
Michael Macchiaroli, Associate Director, Division of Trading and Markets, SEC

**Attachment**  
**Proposed Rule Text**

**(f) (1)** The member, broker, or dealer maintaining and preserving records pursuant to §§ 240.17a-3 and 240.17a-4 in electronic format shall establish appropriate systems and controls that ensure the authenticity and reliability of the records, including, without limitation:

(i) Systems that maintain the security, signature, and data necessary to ensure the authenticity of the information contained in the record and to monitor compliance with the Act and the rules thereunder;

(ii) Systems that ensure the member, broker, or dealer is able to produce records in accordance with this section, and ensure the availability of such records in the event of an emergency or other disruption of the records entity's electronic record retention systems;

(iii) An inventory that identifies and describes each system that maintains information necessary for accessing or producing records;

**(2)** If a member, broker, or dealer uses electronic storage media, it shall:

**(i)** Have the records available for examination by the staffs of the Commission and self-regulatory organizations of which it is a member.

**(ii)** Be ready to provide records requested by 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.

**(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.

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