



July 8, 2013

VIA ELECTRONIC MAIL

Elizabeth M. Murphy, Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

Re: Proposed Regulation Systems Compliance and Integrity
Securities and Exchange Commission (“SEC” or “Commission”)
Release No. 34-69077; File Number S7-01-13

Dear Ms. Murphy:

Omgeo LLC (“Omgeo”)¹ appreciates the opportunity to comment on the Commission’s proposed new Regulation Systems Compliance and Integrity (“Proposed Regulation SCI” or “Proposed Rule”) and proposed amendments to Regulation ATS under the Securities and Exchange Act of 1934 (“Exchange Act”).² Generally, Omgeo is supportive of Proposed Regulation SCI and its goals that SCI entities (as defined in the Proposed Rule) establish levels of systems capacity, integrity, redundancy, resiliency, availability, and security adequate to maintain their operational capability and operate in compliance with the Exchange Act. We look forward to contributing to the successful implementation of the Proposed Rule.

Omgeo believes that the Proposed Rule should be amended to allow SCI entities to meet the goals of the Proposed Regulation SCI in a more efficient and effective manner. Omgeo strongly believes that SCI entities should be required to report SCI events solely where materiality standards and risk-based assessments indicate such events are likely to result in material harm to their operations, or in significant harm or loss to market participants. Omgeo also believes the Proposed Rule should not focus on legal and regulatory compliance by SCI entities, but rather should focus on operational and security issues. We believe that the application of many of the provisions of the Proposed Rule will result in increased

¹ Omgeo is a Delaware limited liability company that is a joint venture between The Depository Trust and Clearing Corporation and Thomson Reuters. On April 17, 2001, the Commission issued an order granting Omgeo an exemption from clearing agency registration to provide central matching and electronic trade confirmation services. See Global Joint Venture Matching Services – US, LLC; Order Granting Exemption from Registration as a Clearing Agency, Securities Exchange Act Release No. 44188 (April 17, 2001), 66 FR 20494 (April 23, 2001) (File No. 600-32) (“Omgeo Exemptive Order”).

² See Securities Exchange Act Release No. 69077 (March 8, 2013), 78 FR 18084 (March 25, 2013) (“Proposing Release”).

system, regulatory and compliance burdens to SCI entities and their clients, members and participants,³ increasing costs and handicapping innovation without yielding the results the Commission hopes to achieve in adopting Regulation SCI.

Omgeo is particularly concerned about the following issues embedded in the Proposed Rule:

- The proposed definition of “SCI entity” in Proposed Rule 1000(a) should be clarified to apply to any clearing agency that provides matching services or any entity that provides electronic confirmation and affirmation of depository-eligible trades settling in the U.S.;
- The proposed definitions of “SCI system” and “SCI security system” in Proposed Rule 1000(a) are too broad;
- The proposed definitions of the elements of the term “SCI event” in Proposed Rule 1000(a) are too broad (or unnecessary);
- The proposed reporting obligations in Proposed Rule 1000(b)(4) are unnecessarily burdensome;
- The proposed information dissemination requirements in Proposed Rule 1000(b)(5) are too extensive and are impractical;
- The proposed reporting requirements for material systems changes in Proposed Rule 1000(b)(6) are overly burdensome and unnecessary;
- Proposed Rule 1000(b)(7) is too broad and should be significantly narrowed;
- The periodic reports on material systems changes in Proposed Rule 1000(b)(8)(ii) would be duplicative of reports required under Proposed Rule 10000(b)(6) and should be eliminated;
- The business continuity arrangements set out in Proposed Rule 1000(b)(9) is impractical and unfair;
- Proposed Rule 1000(f), which would provide Commission representatives with access to SCI systems and SCI security systems, should be eliminated;
- Proposed Form SCI should not require SCI entities to estimate losses or damages resulting from SCI events; and
- The cost benefit analysis of Regulation SCI consistently underestimates the burden of implementation of the Proposed Rule.

I. The Definition of SCI Entity is Too Narrow and Does Not Sufficiently Capture Key Financial Service Providers

Omgeo notes that the Proposed Rule would include within the definition of “SCI entity,” an “exempt clearing agency subject to ARP.” Proposed Rule 1000(a) defines this term as “an entity that has

³ Omgeo notes that it is not a self-regulatory organization (“SRO”), and it therefore does not have members or participants. However, because much of the language in proposed Regulation SCI speaks in terms of members or participants, Omgeo uses the term “members or participants” in our letter to include Omgeo clients as well as SRO members or participants.

received from the Commission an exemption from registration as a clearing agency under Section 17A of the Act, and whose exemption contains conditions that relate to the Commission's Automation Review Policies (ARP), or any Commission regulation that superseded or replaces such policies."

The Proposing Release notes that currently Omgeo is the only entity meeting the requirements of the proposed term "exempt clearing agency subject to ARP." That is because, as the Commission notes, among the operational conditions in the Omgeo exemptive order were several that directly related to the ARP policy statements. The Commission states that "[f]or the same reasons that it required Omgeo to abide by the conditions relating to the ARP policy statements in the Omgeo Exemptive Order, the Commission preliminarily believes it would be appropriate that Omgeo (or any similarly situated clearing agency) should be subject to the requirements of [P]roposed Regulation SCI . . ." ⁴

Omgeo believes that it would be reasonable for the Commission to subject Omgeo, or any similarly situated clearing agency, to requirements for systems capacity, integrity, redundancy, resiliency and security that would help reduce the likelihood, and mitigate the impact of, a material systems disruption or material systems intrusion. Clearing agencies that provide matching services perform a critical role in the infrastructure of the U.S. financial markets. Such entities also handle tremendous amount of highly confidential proprietary trade data of industry participants.

Omgeo requests, however, that the Commission clarify that a "similarly situated clearing agency," as mentioned in the Proposing Release, would include, without limitation, any entity providing either matching services⁵ or confirmation/affirmation services for depository eligible securities that settle in the United States as contemplated by FINRA Rule 11860. That would alleviate any doubt whether an entity performing either of these critical roles would be subject to the requirements of Proposed Regulation SCI, if adopted.⁶

II. Definitions of "SCI System" and "SCI Security System"

The proposed definitions of "SCI system" and "SCI security system," are so broad as to potentially include almost every automated system used by an SCI entity. Proposed Rule 1000(a) defines "SCI systems" to mean "all computer, network, electronic, technical, automated, or similar systems of, or operated by or on behalf of, an SCI entity, whether in production, development, or testing, that directly support trading, clearance and settlement, order routing, market data, regulation, or surveillance." The Proposed Rule would define "SCI security systems" as including "any systems that share network resources with SCI systems that, if breached, would be reasonably likely to pose a security threat to SCI systems."

⁴ See Proposing Release at 18097.

⁵ The Omgeo Exemptive Order defines "central matching services" as an electronic service to centrally match trade information between a broker-dealer and its institutional customer (so long as one or both of such parties is a U.S. person) relating to transactions issued by a U.S. issuer, regardless of where the transaction settles. See Omgeo Exemptive Order at fn.6.

⁶ Omgeo notes that a "qualified vendor" may provide confirmation/affirmation services for depository eligible securities that settle in the U.S. as contemplated by FINRA Rule 11860. Due to the important role of confirmation/affirmation services to the integrity of the U.S. financial markets, and the significant amount of data any such entity would possess, Omgeo recommends that the Commission include "qualified vendors," as defined in FINRA Rule 11860 as SCI entities also.

A. Recommended Changes to the Definition of SCI Systems

Omgeo recommends that the definition of SCI systems be narrowed. Specifically, the final Rule should distinguish between critical and non-critical or ancillary systems, the former would be SCI systems and the latter would fall outside of these definitions and therefore outside of the scope of Proposed Regulation SCI. Omgeo encourages the Commission to focus the definition on SCI systems which are significant to the operation of the markets or to data security for those same systems, so as to avoid the dilution of effort which would result from attention on systems which are inherently non-critical and ancillary.

Specifically, Omgeo requests that the final Rule narrow the definition of SCI systems by making it clear that such systems are limited to the kind whose failure or degradation would reasonably be expected to have an adverse material impact on the sound operation of financial markets.⁷ SCI entities provide a variety of different services which directly support the financial markets, however not all of these services and systems are equally important – some are critical to the sound operation of the U.S. financial markets, but many of these services are not.⁸ Regulation SCI should be focused on those systems whose failure or degradation would have an adverse, material impact on the sound operation of the financial markets.

The Proposed Rule, unfortunately, makes no such distinction and as a consequence risks undermining the goals of Proposed Regulation SCI by diverting valuable critical and finite security resources from protecting “significant” systems to protecting those that are inherently non-critical and ancillary. To address this potential misallocation of critical and finite resources Omgeo suggests that the following qualification be added to the definition of SCI systems in Proposed Rule 1000(a): “where failure or degradation of such systems would reasonably be expected to have an adverse material impact on the sound operation of financial markets.”

⁷ Omgeo recognizes that information security is an important component of Proposed Regulation SCI. However, the fact that the escape or corruption of data contained in a system might impact market participants should not, of itself, cause that system to be considered an SCI system. Broker-dealers, investment managers and other participants in the financial services industry often handle highly confidential information, which if lost or stolen could harm market participants, including investors. Proposed Regulation SCI, however, is not intended to regulate the entire financial services industry, but rather solely those entities whose operations are of vital importance to the operational functioning of that industry.

⁸ Omgeo believes that SCI systems should be limited to those services which directly support transactions rather than services that are primarily informational in nature. For example, for Omgeo, SCI systems should only include its matching and confirmation/affirmation processing services. It should not include aspects of these systems not directly involved in processing trades. Omgeo’s CTM system, a key function of which is the matching of trades, has features such as the FTP system that are not critical to the matching of trades. The FTP system delivers notifications and non-critical files to interested parties. Billing systems provide another example of systems that interact with SCI systems, but should not be considered as actual SCI systems since billing alone is not material to the actual execution, processing, clearing and settling of trades. While those notifications or critical functions are important they are not critical to the matching service or to the sound operation of the financial markets. Similarly, Omgeo’s Benchmarks service, while valuable to its users, is not directly involved in the matching and confirmation and affirmation of trades and thus should not be designated as a SCI system.

Such a qualification of the scope of the definition would further strengthen the risk-based approach of Proposed Regulation SCI. While the Proposing Release often uses risk-based language such as "reasonably likely" and "likely to cause any impact" it makes no mention of assessing systems and services for such risk. Rather than leaving the definitions broad and open for interpretation, the Commission should require SCI entities to implement processes to identify and assess risks in SCI systems.

To implement a risk-based prioritization, the Commission should require SCI entities to develop and maintain an established methodology for identifying which systems qualify as "SCI systems," and the methodology and assessment criteria should be subject to review by the Commission. This requirement would be essential to the effectiveness of the provisions. A specific and on-going program for identifying SCI systems or assessing their significance is necessary for the sound operation of the financial markets. Without such programs, SCI entities may unintentionally focus on the lowest risks, or omit new systems from the controls which are covered by Proposed Regulation SCI and which may have material impacts on the markets.

Furthermore, the inclusion of development and testing systems in the definition of SCI systems is impractical.⁹ Reasonably isolated development and testing systems are unlikely by themselves to cause an adverse material impact on the financial markets and, as noted above, forcing SCI entities to treat them as significant would only misallocate critical and finite resources. In addition, development and testing systems are designed to identify problems and to qualify changes before errors are introduced into production system, *i.e.*, significant or true SCI systems. Development and testing processes explore issues that could have potentially adverse impact on the markets. These processes allow SCI entities to identify such issues and develop means to mitigate them, and thus prevent the occurrence of material impacts in production environments. Requiring development and testing systems to be constrained narrowly to Proposed Regulation SCI standards would inhibit SCI entities from exploring and testing these conditions. This would inadvertently introduce systemic and material risks into the financial markets. It would also interfere with SCI entities' efforts to develop and test corrections and "work-arounds" for such potentially adverse conditions. Thus, Omgeo strongly believes that including such systems in the definition of "SCI systems" would be counter to the goals of Proposed Regulation SCI.

Finally, the Commission asks in Request for Comment 22 of the Proposing Release if the definition of SCI system should include those systems operated "on behalf of" an SCI entity by a third party under contract from an SCI entity. Omgeo does not believe it is realistic to include third party systems in the definition of SCI system. Given the current structure of US markets, it would be unrealistic, impractical and unfair to hold an SCI entity accountable for the compliance issues of systems

⁹ Where an SCI entity has segregated its testing and production environments, the final version of Regulation SCI should exclude from this definition any systems that are in development and testing, and should ensure that the definition only include actual production systems. One of the consequences of including development and testing systems in this definition would be to force SCI entities to report the same changes multiple times – first in development, second in testing, and third when the change is actually put into production.

Additionally, there are many changes in development and testing that never are put into production. Omgeo, for example, sometimes deploys significant technology in development and testing because these technologies are specific to development and testing, but which are not required in production systems, *e.g.*, software interpreters and compilers. The proposed definition would require, among other things, a large number of service change notifications to be filed for changes that would never be material to the markets or market participants. This activity would become a steady drain on the finite and critical resources of SCI entities.

operated by other market participants that interface with its SCI systems. Among other things, an SCI entity would almost certainly be unable to satisfy the extensive reporting and dissemination requirements of Proposed Rules 1000(b)(4) and 1000(b)(5) with regard to systems owned and operated by a separate entity.

B. Recommended Changes to the Definition of SCI Security Systems

Omgeo encourages the Commission to require that SCI entities adopt and implement a risk-based approach for identifying which specific systems would be reasonably likely to pose a security threat to the SCI systems. However the proposed definition of "SCI security systems" is exceptionally broad and open to misinterpretation. The Proposing Release identifies as potential examples of SCI security systems "administrative services," "email capability" and "financial and accounting systems." In most well-designed security architectures and controls exist to keep such non-critical systems segregated and firewalled from critical SCI systems to minimize the security impact a breach would have. Without such security architecture and its related controls, breach of nearly *any* networked system may put the SCI systems at risk.

The SCI entity's risk-based approach should reference the SCI entity's security architecture for such systems, ensuring that the assessment accounts for risk related to the security architecture as well as to the systems themselves. The methodology and assessment criteria could then be subject to review by the Staff. By requiring SCI entities to perform this risk analysis, the final version of Regulation SCI would offer a practical solution to a very difficult problem and also promote beneficial risk management and multi-layered system security practices within the financial services industry. It would also have the meritorious effect of ensuring resources and attention is provided to the higher risk systems by allowing a flexible approach to allocation of the SCI entity's critical and finite security resources.

III. Proposed Definitions of "SCI Event"

A. The Definition of SCI Event Is Too Broad

Proposed Regulation SCI would require the reporting to the Commission and the notification of members or participants of specified "SCI events." This term is defined very broadly as "an event at an SCI entity that constitutes: (1) a systems disruption; (2) a systems compliance issue; or (3) a systems intrusion." Omgeo believes the definitions of "systems disruption" and "systems intrusion" are broader than necessary in order to achieve the purposes of Proposed Regulation SCI. Omgeo also does not believe an SCI compliance issue should be considered an SCI event, unless it otherwise constitutes a systems disruption or systems intrusion. In such event, the SCI entity should be required to report or inform members or participants about the systems compliance issue only to the extent it otherwise would have to report or inform members or participants about the systems disruption or systems intrusion resulting from the systems compliance issue.

B. Definition of Systems Disruption

1. Definition of Systems Disruption

A "systems disruption" is defined in the Proposed Rule as: (1) "a failure to maintain service level agreements or constraints; (2) a disruption of normal operations, including switchover to back-up equipment with near-term recovery of primary hardware unlikely; (3) a loss of use of any such system; (4) a loss of transaction or clearance and settlement data; (5) significant back-ups or delays in processing; (6) a significant diminution of ability to disseminate timely and accurate market data; or (7) a queuing of

data between system components or queuing of messages to or from customers of such duration that normal service delivery is affected.”¹⁰

2. Definition of Systems Disruption Should be Narrowed

Omgeo supports the Commission’s objective of making the definition of significant systems outages easier to understand and apply in practice. ARP I and ARP II provided little guidance regarding which outages needed to be reported, beyond the qualification that reportable outages were “significant.” Hence the ARP staff issued guidance subsequently in an Interpretive Letter on what constitutes a “significant” outage in the form of a list of ten “non-exclusive examples” of events which the Staff deemed to be significant.¹¹ Proposed Regulation SCI seeks to improve upon this guidance by revising the list of criteria and codifying it as a formal definition.

The Interpretive Letter’s original list and the interpretive framework in which they were given provided ARP entities appropriate latitude in applying that list to the particular functions performed by ARP entities in the financial markets. This interpretive latitude has made the ARP’s Systems Outage Notification requirement workable in real-world outage scenarios.

Proposed Regulation SCI removes the flexibility of the current interpretive framework by codifying the list of criteria rigidly as a fixed definition of the meaning of “significant” outages. This rigid approach conflicts with the previous ARP approach of providing non-exclusive examples meant to convey this meaning more freely. The ARP approach was not to attempt to materially address the difficulties in the criteria themselves, or the practical application of the seven elements comprising the proposed definition. As suggested below, Omgeo believes the Commission should determine that the interpretive framework set out in the Interpretive Letter should be retained. The flexibility inherent in the ARP approach to this issue would be a valuable component of the practical working of Proposed Regulation SCI.

Omgeo recognizes that the reporting requirements for system disruptions under Proposed Rule 1000(b) (4) is limited to events which the “SCI entity reasonably estimates would have a material impact on its operations or on market participants.” We recognize further that the information dissemination requirements under Proposed Rule 1000(b) (5) would be limited to a systems disruption “that results or the SCI entity reasonably estimates would result, in significant harm or loss to market participants.” However, the Commission’s discussion of the definition of “systems disruption” in the Proposing Release creates a concern that the application of Proposed Regulation SCI, if adopted as proposed, would create a reporting and information dissemination burden that far exceeds the intent and value of such reporting to the Commission or the Staff, as well as creating uncertainty that will result in a significant compliance burden on SCI entities.

¹⁰ See Propose Rule 1000(a).

¹¹ See June 1, 2001 Memorandum to SROs and Nasdaq from Larry E. Bergmann, Senior Associate Director, Division of Market Regulation, SEC (June 1, 2001) re: Guidance for Systems Outage and Systems Change Notifications (“Interpretive Letter”); see also Securities Exchange Act Release No. 47638 (April 7, 2003), 68 FR 17809 (April 11, 2003) (Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System) (“Interagency White Paper”).

3. Discussion of Specific Elements in Proposed Definition

Omgeo objects to the Commission's discussion of the elements of the definition of systems disruption in Proposed Regulation SCI as they relate to the meaning of "systems outage." Omgeo also objects to the excessively broad scope of certain of the elements of this definition. Several of the elements of this definition are so broadly interpreted in the Proposing Release that they would include events which bear uncertain or indeterminate relationship to systems outages.

For example, the second and third elements of the proposed definition, which directly address service disruptions and losses of systems, would include situations in which no actual disruptions of service occur, although they could reasonably be seen to have a material impact on the SCI entity's operations while in effect.¹² This odd result is inherent in the Commission's interpretation of the third element of the definition, which would cover events even where the disrupted system is "immediately replaced by backup systems without any disruption to normal operations."

Similarly, the Commission intends the second element to "capture problems with SCI systems such as programming errors, testing errors, systems failures, or if a system release is backed out after it is implemented in production." In discussing this element, the Commission stated its preliminary belief that "an SCI entity should be required to notify Commission staff of a SCI systems problem that involves a switchover to backup equipment, even if a determination that no recovery is possible has not been made because the probability that such switchover may continue indefinitely is significant."¹³ Here the proposed definition would require an SCI entity to report programming errors and testing errors without regard to whether they caused or would be likely to cause a disruption of service in production, if there was even a short-term switchover to back-up. Additionally, a short-term switchover to back might be required in order to meet the business continuity testing requirements mandated by Proposed Regulation SCI or general maintenance of the system that typically timed to occur when financial markets are closed. By determining preliminarily that such an event would be significant, without a determination that the SCI entity deems it reasonably likely the systems disruption would have a material impact on its operations or on market participants, the Commission implies that each element in the proposed definition of "systems disruption" should be read broadly as well (or at least that the occurrence of each such element, in itself, may require reporting). That leads to our general concern that the definition, or at least the Commission's interpretation of it, is overbroad and needs to be revised.¹⁴

¹² Transient systems events may cause a queuing of customer orders. However, such events may not disrupt the SCI system, and, assuming they are resolved in a timely manner, would not necessarily result in harm to clients or to financial markets.

¹³ Proposing Release at 18101.

¹⁴ The Commission should also consider the heavy burden these broad definitions will impose on the Staff. The burden analysis for Proposed Regulation SCI cites more than once the statistic that the ARP Staff only received reports of 175 incidents in 2011 for the 29 entities that were covered by the ARP Inspection Program. See, e.g., Proposing Release at fn. 409. The Proposed Rule would, for the reasons discussed throughout this comment letter, result in a dramatic increase in the number of such reports and would therefore require substantial resources for the Staff to process them in a responsible fashion. See also Testimony on Budget Before the United States House of Representatives, Committed on Appropriations, Subcommittee on Financial Services and General Government, by Mary Jo White, Chair, SEC (May 7, 2013) (discussing the "mismatch between the amount of regulated clearing activity and staffing [that will be] exacerbated both by the additional clearing agencies that are expected to register with the SEC as a result of security-based swap activities and the expanded oversight required due to

In this regard, Omgeo is concerned that the inclusion of “testing errors” within the proposed application of this definition would produce outcomes that are ultimately contrary to the stated goals of the Commission in issuing Proposed Regulation SCI. Both the writing of software and the testing of systems, by their very nature, involve the occurrence a number of errors. Omgeo wants to emphasize to the Commission that the purpose of testing is in fact to identify errors and prevent them from impacting markets. The discovery of such errors during testing promotes the implementation of error-free systems through the routine testing and defect-repair cycle of modern systems development methodologies.

Thus, to require testing errors to be considered SCI events that must be reported to the Staff could have the unintended consequence of discouraging SCI entities from conducting effective quality assurance programs. This could have the unforeseen and negative effect of undermining good quality engineering practices. It could, contrary to the clear intention of Proposed Regulation SCI, ultimately result in an increased number of systems defects being introduced into production.

In addition, the reporting of such errors as systems disruptions would require personnel at the SCI entity to determine, with potentially little basis, whether they likely would result in a material impact on its operations or on market participants. The difficulties in making such determinations would likely lead SCI entities to over-report, as failure to report such an event might later be found to be a violation of the federal securities laws. Moreover, the process of reporting itself may divert critical and finite SCI entity resources by detracting attention and focus from important testing and defect-repair efforts toward the reporting process. This perversely would undermine, instead of strengthen, the resilience and integrity of the SCI systems. Also, a result of the proposed broad interpretation would be to generate a tremendous amount of reporting that would offer little, if any value, to the Commission or the Staff.

Similarly, the first and seventh elements in the proposed definition address failures to “maintain service level agreements” and “normal service delivery” even where included events have no relationship to systems outages of even insignificant impact. The Commission’s rationale for proposing these elements is that failures to meet agreed or “normal” service levels “are often warning signals of significant disruption of normal systems operations.” However, to require an SCI entity to self-report each such a time a “warning signal” of a possible material impact on the SCI entity’s operations or on market participants would significantly widen the scope of an SCI entity’s reporting obligations without materially improving the protection of the financial markets against systems outages. While the failure to meet “contractual obligations to provide a service at a specified level or speed of service” may represent a breach of contract, such events are often too minor to be noticed by any participant in the markets and thus are not disruptions of the service or material risks to the SCI entity or to the user of the SCI service.

Omgeo generally supports including the concept of performance degradations as the fifth and sixth elements of the proposed definition of systems disruption. Delays either in transaction processing or in disseminating market data or the results of such transaction processing, are, at a sufficient point in their significance, inseparable from actual systems outages. In both cases, market participants for a time do not receive the necessary information to clear and settle their trades. However, Omgeo objects to the interpretation given to the word “significant” in the fifth and sixth proposed elements as overly broad, because it would include delays which are too small to be reasonably considered significant. In the Proposing Release, the Commission gives the following examples of how these two proposed elements should be interpreted:

clearing agencies’ designations as systemically important by the FSOC” under existing SEC rules; *i.e.*, prior to adoption of Proposed Regulation SCI) at <http://www.sec.gov/news/testimony/2013/ts050713mjw.htm>.

“Instances in which message traffic is throttled (*i.e.*, slowed) by an SCI entity for any market participant, without a corresponding provision in the SCI entity's rules, user agreements, or governing documents, as applicable, would also be covered here. Further, the Commission preliminarily believes that if customers or systems users, for example, have complained or inquired about a slowdown or disruption of operations, including, for example, a slowdown or disruption in their receipt of market data, then such circumstance would be indicative of a problem at an SCI entity that results in ‘significant back-ups or delays in processing’ or a ‘significant diminution of ability to disseminate timely and accurate market data,’ that should be considered a ‘systems disruption.’ The fifth and sixth elements of the proposed definition of systems disruption are also intended to cover the entry, processing, or transmission of erroneous or inaccurate orders, trades, price-reports, other information in the securities markets or clearance and settlement systems, or any other significant deterioration in the transmission of market data in an accurate, timely, and efficient manner.”¹⁵

There are a number of reasons why message traffic could slow or effectively be throttled for short periods of time, without justifying the need for reporting to the Commission. As noted in footnote 150 of the Proposing Release, throttling (or, by extension, any performance slowdown) could be “part of normal operations” of the system or service.¹⁶ For example, while today’s network technologies have largely eliminated the incidence of packet collision which plagued computer networks in the past, transient communication errors requiring network retries and retransmissions are a normal part of network operations and could introduce temporary latency in the communication between components of the system and hence the effective speed of data processing or dissemination. Generally, Omgeo believes these events are so limited in scope as to not require a report to the Commission.

Similarly, ordinary variability with both the patterns and timing of inbound user connections and with server infrastructures and processing routines can produce significant if highly transient processing “delays” or “queuing” in some part of the system’s components. Omgeo’s experience is that such processing variability can, from one transaction to the next, exceed more than a full order of magnitude, or more than 10 times. Whatever the relative significance of such performance swings, it is an ordinary part of “normal operations” in very high volume systems with very large numbers of users. Whether such variability in systems performance represents comparatively “significant” delays in processing or diminution of ability to disseminate market data in a timely manner, or is of such duration that “normal service delivery is affected,” depends largely on the business and technical context of the SCI systems and the services they render. For example, whereas trade execution platforms may be highly sensitive to sub-second variations in processing speeds, post-trade matching and confirmation/affirmation may be performed at a slower rate without a material or significant impact to the financial markets. At the same time, short-lived anomalies in processing speeds can be handled gracefully in the post-trade clearing space by the sound technical design of the service interfaces without adversely affecting market participants or introducing risk to the financial markets. The Proposed Rule as interpreted by the Proposing Release makes no reasonable distinction between significant and insignificant delays or queuing -- which would likely lead to tremendous over-reporting of minor events.

The same analysis is true with regard to customer complaints. Under the proposed interpretation of these elements a single customer complaint, no matter how unreasonable, would have to be considered “significant” and thus potentially a systems disruption event requiring reporting under the process set out in Proposed Rule 1000(b)(4) and dissemination under Proposed Rule 1000(b)(5). While it is true that delays in trade affirmation can materially impair critical markets, Omgeo has found that the

¹⁵ Proposing Release at 18102.

¹⁶ Proposing Release at fn. 150.

overwhelming majority of customer complaints relating to delays in receiving notice of affirmation are due either to systems errors or business process discrepancies on the customer's end, or to ordinary processing exceptions on the counterparty's end. Distinguishing such cases from real service disruption or degradation within the SCI entity's systems and system capabilities is often a time-consuming process of investigation and analysis conducted by multiple levels of SCI entity management and resources. To treat these complaints as significant systems disruptions simply because they are made would impose an unfair, unnecessary and unproductive burden on the SCI entity.

The same is also true regarding the inclusion in the definition of the entry, processing, or transmission of trades and "other information in securities markets or clearance and settlement systems . . ." ¹⁷ This language is so broadly drafted as to potentially take even the most minor data entry error and transform it into a "significant diminution of [an SCI entity's] ability to disseminate timely and accurate market data." Omgeo publishes its data entry requirements to its client users in the form of detailed message specifications, and takes care to implement pre-emptive validation checks to prevent the introduction of errant data into SCI systems. However, despite these precautions, sometimes errant data does make its way into the SCI systems. Omgeo therefore also implements comprehensive error handling routines to prevent errant data from triggering system-wide disruptions, and performs extensive 'negative' testing to assure the system can survive the introduction of the errant data without harm to the operations of the SCI entity, the market participants, or the financial markets as a whole. Even if no harm occurred or if the data entry error was quickly addressed, the Proposing Release would require that such a minor event be classified as a "system disruption" worthy of the Staff's time and attention. Omgeo respectfully submits that minor data entry errors which are promptly identified and corrected should not be treated as something more serious.

Omgeo believes that the Commission's goals for Proposed Regulation SCI would be best met by narrowing the definition of "significant systems disruptions" to a simpler list of elements, making it easier for SCI entities to understand, interpret, and apply this definition and its serious implications to their business and technical contexts. Instead of seven broad elements broadly interpreted, the revised definition of systems disruption should have two elements: (1) *disruptions* of either the SCI systems or of the operations of the SCI entity that have the effect of disrupting the delivery of the SCI service provided by those systems; and (2) *degradations* of SCI systems processing creating backups or delays of such a degree and duration that the delivery of service is effectively disrupted or unusable by the market participants who use the systems. Moreover, the precise terms of such disruptions or degradations should be determined by the SCI entities by applying the definition to their SCI systems within their business and technical contexts.

4. Additional Comment on Proposed Definition of Systems Disruption

The language of the fourth proposed element of the definition of systems disruption should be revised to add the word "corruption." Sometimes data is not simply lost, it can be altered – potentially in ways that will create risk that a transaction will fail. Omgeo believes that if transaction or clearance and settlement data is altered or corrupted in some way this error should be reported to the Staff even if the data is not "lost."

C. Definition of Systems Intrusion

Proposed Rule 1000(a) would define a "systems intrusion" as "any unauthorized entry into the SCI systems or SCI security systems of an SCI entity." Omgeo believes the proposed definition is overly broad and should therefore be amended.

¹⁷ Proposing Release at 18102.

Omgeo notes that the proposed definition of “systems intrusion” does not contain a reference to the materiality of that intrusion nor to the intrusion’s impact on markets or market participants. Modern security controls are multi-layered and are intended to work together to provide a depth of defense, fully anticipating that outer, more exposed layers may be intruded upon. An unauthorized entry into a well-designed SCI system may not result in a materially increased risk to the availability and integrity of the SCI system. In a resilient security system, it is planned that primary controls may fail under certain circumstances, but that secondary and tertiary controls will assist in limiting or eliminating the risk posed by such failure. The Proposed Rule does not appear to recognize the sophistication of current cyber defenses or the multi-layered security architecture implemented in a well-designed security system. Instead, it would treat any immaterial intrusion as a significant event. The final Rule should remediate this simplistic approach.

The fact that a peripheral system with limited exposure is intruded upon does not make such intrusion material. For example, if a perimeter SCI system exposed to the Internet was breached by an attacker, but the perimeter SCI system *by design* contained no sensitive data and in the act of intruding secondary detective controls correctly identified the attack preventing the attacker from penetrating further, the unauthorized entry into the system would have no material impact. Reporting such an attack to the Commission would therefore be of limited value. Because information about the attack (including the methods used by the attacker) may be relevant to the larger community, however, Omgeo believes it would be more reasonable instead to require SCI entities to report such attacks to the Financial Services ISAC, which was specifically established to disseminate information about such attacks, quickly and confidentially, to the larger financial community.

Regarding the Commission’s concern that a successful compromise might be an indication of a weakness in the SCI entity’s controls, Omgeo recommends that SCI entities be required to investigate and keep records of all unauthorized access of data and “systems intrusions” -- including malware. Such investigations and records should include a determination by the SCI entity of materiality with respect to SCI systems. These records should be available to the Staff as part of the regular inspection process. This would allow the Staff to review the functioning of the SCI entities’ controls for thematic weaknesses, which are unlikely to be identified from any single reported incident.

Request for Comment 42 in the Proposing Release asks whether the definition of systems intrusion should include “the unauthorized use or unintended release of information or data, for example, by an employee or agent of an SCI entity.” In response, Omgeo notes that a systems intrusion is a very different situation from unauthorized disclosure of data. The latter may occur in ways entirely unrelated to automated systems and may occur in violation of an internal procedure but result in no material exposure of the data. Omgeo takes the protection of our clients’ data extremely seriously and has many internal practices designed to protect such information and limit potential exposure to non-material data. Omgeo believes that should the Commission require notification of a data disclosure, that such notification be limited to material disclosure to unauthorized third parties. Materiality of the disclosure needs to take into account the confidentiality of the information (*e.g.*, aged transaction data used for testing vs. current data), and the exposure (*e.g.*, good-faith access by an unauthorized SCI entity employee with no outside disclosure or malicious intent vs. exposure to an unauthorized third-party).

D. Inclusion of SCI Compliance Issue Is Inappropriate and Unnecessary

1. Definition of “Systems Compliance Issue”

A “systems compliance issue” is defined in the Proposed Rules as: “an event at an SCI entity that has caused any SCI system of such entity to operate in a manner that does not comply with the federal securities laws and rules and regulations thereunder or the entity's rules or governing documents, as applicable.”

2. Compliance Issues Should Not be SCI Events

Under Proposed Rule 1000(b) (4), an SCI entity would be required to report a systems compliance issue to the Commission upon any responsible SCI personnel becoming aware of the systems compliance issue. Under Proposed Rule 1000(b)(5), an SCI entity would be required to disseminate to all its members and participants specified information promptly upon any responsible SCI entity personnel becoming aware of a systems compliance issue. As discussed below, Omgeo does not believe a systems compliance issue should be reported to the Commission or disseminated to an SCI entity’s members, participants or clients unless the systems compliance issue otherwise meets the terms of the definition of either “systems disruption” or “systems intrusion,” and then only on such terms as systems disruption or systems intrusions are otherwise reported or disseminated. A systems compliance issue therefore should not be within the definitions of “SCI event” or “dissemination SCI event.”

Omgeo does not believe a broad reporting requirement focused on compliance with all relevant federal securities laws should be a part of the final version of Regulation SCI. The Proposed Rule is not an appropriate tool for the broad reporting and ultimately the general enforcement of federal securities laws and regulations. Omgeo is concerned that if adopted as proposed, Regulation SCI would become, in effect, a self-reporting requirement for all SCI entities, with the result that failure to self-report a compliance issue resulting from a systems problem would itself be a violation of the federal securities laws. Omgeo is also concerned that the dissemination requirement would impose on SCI entities the requirement to admit to a likely violation of law, without a full investigation or adjudication of the facts, thereby exposing SCI entities to unnecessary and potentially costly litigation.

In addition, Omgeo is concerned that the responsible SCI personnel would each be held accountable for knowing when a systems compliance issue has arisen. Unlike a systems disruption, which responsible operations or technical personnel within an SCI entity are likely to be able to detect, responsible operations or technical SCI personnel may not be aware of potential legal and compliance implications of a systems compliance issue, and therefore may not be in a position to report such systems compliance issue to the Commission, or even to notify legal or compliance personnel within the SCI entity who may be in a position to determine whether a systems compliance issue has occurred.¹⁸

¹⁸ Omgeo also believes that the definition of “responsible SCI personnel” in Rule 1000(a) is too broad. Proposed Rule 1000(a) would define “responsible SCI personnel” to mean, for a particular SCI system or SCI security system impacted by an SCI event, any personnel, whether an employee or agent of an SCI entity having responsibility for such system. The proposed definition may therefore include relatively junior or inexperienced employees of an SCI entity, including those without management responsibility. Because the decision whether to notify the Commission of an SCI event should reasonably be made by the management of an SCI entity, Omgeo believes the definition of responsible SCI personnel should therefore be revised to mean an employee of an SCI entity with management responsibility over an SCI system or an SCI security system. Under this revision, each SCI entity’s policies and procedures would require responsible employees or agent of the SCI entity to inform their supervisors upon becoming aware of an SCI event.

Proposed Regulation SCI, as a successor to the ARP Inspection Program, should instead continue to focus on issues like capacity and vulnerability of the technology systems used by SCI entities. Both ARP I¹⁹ and ARP II²⁰ focused on the technology side of industry automation rather than on the legal and enforcement side of this important industry trend. In the Proposing Release, the Commission acknowledges the continuing focus on technology matters of the current ARP Inspection Program:

“Today, the ARP Inspection Program covers nine general inspection areas, or information technology “domains:” application controls; capacity planning; computer operations and production environment controls; contingency planning; information security and networking; audit; outsourcing; physical security; and systems development methodology.”²¹

In addition, the main thrust of Proposed Regulation SCI is consistent with the themes of ARP I and ARP II. Indeed, Proposed Rule 1000(b)(1) clearly states that each SCI entity shall:

“Establish, maintain, and enforce written policies and procedures reasonably designed to ensure that its SCI systems and, for purposes of security standards, SCI security systems, have levels of capacity, integrity, resiliency, availability, and security, adequate to maintain the SCI entity's operational capability and promote the maintenance of fair and orderly markets.”

Omgeo therefore maintains that the proposed reporting requirements for systems compliance issues is inconsistent with the purposes of ARP I, ARP II, and Proposed Regulation SCI. Omgeo believes that this element of the definition of SCI event significantly transforms the current ARP Inspection Program from a program focused on the integrity of automated systems into a program that would function as a conduit for enforcement of the federal securities laws generally, through mandated self-reporting. Indeed, the Proposing Release essentially admits this when it states that “[t]he inclusion of systems compliance issues should help the Commission and market participants to become better informed of the efforts of the SCI entities to comply with relevant laws and rules, and their own rules as applicable, and could enhance the enforcement of such laws and rules.”²² As a result, the Proposed Rule unnecessarily complicates an already burdensome and complicated proposed regulation and ultimately risks undermining the efficacy of the Commission’s ARP Inspection Program.

¹⁹ The Proposing Release notes, quoting from ARP I, “that SROs should ‘establish comprehensive planning and assessment programs to test systems capacity and vulnerability.’” In particular, the Commission recommended that each SRO should: (1) establish current and future capacity estimates for its automated order routing and execution, market information, and trade comparison systems; (2) periodically conduct capacity stress tests to determine the behavior of automated systems under a variety of simulated conditions; and (3) contract with independent reviewers to assess annually whether these systems could perform adequately at their estimated current and future capacity levels and have adequate protection against physical threats.” Proposing Release at 18085.

²⁰ The Proposing Release notes with regard to ARP II that “the Commission again suggested development of standards to meet the ARP policy statements, stating that ‘the SROs, and other interested parties should begin the process of exploring the establishment of (1) standards for determining capacity levels for the SROs’ automated trading systems; (2) generally accepted computer security standards that would be effective for SRO automated systems; and (3) additional standards regarding audits of computer systems.’” Proposing Release at 18086.

²¹ *Id.*

²² Proposing Release at 18166.

Furthermore, the Commission already has the Office of Compliance Inspections and Examinations (“OCIE”) to examine for violations of the federal securities laws. In addition to misallocating critical and finite technical resources, such a new requirement may well harm the current ARP Inspection Program by altering the relationship of SCI entities and their associates to the ARP/SCI examiners and even perhaps to the Staff of the Division of Trading and Markets. If associates and managers at SCI entities begin to view the former ARP/SCI Staff as conduits to OCIE or even the Division of Enforcement to whom systems compliance issues must be reported upon responsible SCI personnel becoming aware of them, this perception will almost certainly affect the way they interact with those members of the Staff charged with carrying out SCI examinations.

Omgeo therefore believes that the Commission should require the reporting or dissemination of information about a systems compliance issue solely to the extent the systems compliance issue otherwise meets the terms of the definition of either systems disruption or systems intrusion, and then only on such terms as information on systems disruptions or systems intrusions is otherwise reported or disseminated.

IV. Proposed Rule 1000(b)(4)

Proposed Regulation SCI would impose a broad array of Commission notice and reporting requirements on SCI entities upon responsible SCI personnel becoming aware of an SCI event. In addition to their sheer number, many of the reports, as explained below, would not further the stated goals of Proposed Regulation SCI. Some reports that would be required could even be detrimental to the Commission’s stated objectives in the Proposing Release of promulgating the Proposed Rule. As a general matter, Omgeo agrees that an SCI entity should be required to report to the Commission a systems disruption where the SCI entity reasonably estimates the systems disruption would result in a material impact on its operations or on market participants. Omgeo agrees further that an SCI entity should be required to report to the Commission systems intrusions only where the SCI entity reasonably estimates such systems intrusion would result in a material disruption of service or a malicious unauthorized access to confidential data. By establishing measures of materiality, critical and finite SCI entity resources will not be diluted by processing and responding to non-material notifications. To ensure reasonable oversight, an SCI entity’s policies for determining materiality could be reviewed as part of the SEC’s examination and oversight process. Omgeo, however, disagrees with the need for the highly burdensome, often unnecessary reporting obligations set out in the Proposing Release.

Proposed Rule 1000(b)(4) would impose the following reporting obligations on SCI entities:

- Proposed Rule 1000(b)(4)(i) would require an SCI entity to notify the Commission upon any responsible SCI personnel becoming aware of a systems disruption that the SCI entity reasonably estimates would result in a material impact on its operations or on market participants, any systems compliance issue, or any systems intrusion.
- Proposed Rule 1000(b)(4)(ii) would require an SCI entity, within 24 hours of any responsible SCI personnel becoming aware of any SCI event, to submit a written notification to the Commission on Form SCI pertaining to such SCI event.
- Proposed Rule 1000(b)(4)(iii) would require an SCI entity to submit written updates on Form SCI pertaining to an SCI event to the Commission on a regular basis, or at such frequency as reasonably requested by a representative of the Commission, until such time as the SCI event is resolved.

A. Proposed Rule 1000(b)(4)

Omgeo believes that Rule 1000(b)(4) would require too many, often unnecessary, written reports to the Staff. Proposed Rule 1000(b)(4)(i) would require that an SCI entity notify the Staff whenever there has been a specified SCI event once responsible SCI personnel become aware of it.²³ While the Proposing Release states the requirement of immediate notification found in Proposed Rule 1000(b)(4)(i) can be satisfied orally, it also allows that it can be satisfied in writing, though in a relatively informal manner such as, for example, via email.

Most SCI entities would submit a writing to document that they had satisfied the notice requirement of Proposed Rule 1000(b)(4)(i). However, the Proposing Release is clear that even when an SCI entity submits written notice to satisfy its obligations under Proposed Rule 1000(b)(4)(i), it would nevertheless have to submit another written report within 24 hours pursuant to Proposed Rule 1000(b)(b)(4)(ii).²⁴ The Proposed Rule is prescriptive regarding what details must be included in the written notification. Proposed Rule 1000(b)(4)(iv) states that the report must include all “pertinent” information about an SCI event and enumerates a list of items that should be included in Form SCI and the accompanying exhibit.

In addition, Proposed Rule 1000(b)(4)(iii) would require an SCI entity to submit to the Staff continual written updates on a regular basis, or at such frequency as reasonably requested by a representative of the Commission, until such time as the SCI event is resolved.

Furthermore, Proposed Rule 1000(b)(4)(iv)(B) would require an SCI entity to update any of the pertinent information contained in previous written notifications, including any information required by proposed Rule 1000(b)(4)(iv)(A)(2) that was not available at the time of initial submission. Subsequent notifications would be required to update any of the pertinent information previously provided until the SCI event is resolved. Proposed Rule 1000(b)(4)(iv)(C) further requires an SCI entity to provide a copy of any information disseminated to date regarding the SCI event to its members or participants or on the SCI entity’s publicly available website. As a result of the many and detailed written notifications, including a continuing obligation to provide written updates on a regular basis or when requested by a representative of the Commission, Proposed Rule 1000(b)(4) is impractical and should be revised as described in detail below. It imposes far too heavy of a written reporting obligation on SCI entities requiring critical and finite resources to be allocated in an inefficient manner possibly delaying the resolution of an SCI event. The Commission should avoid adding to the stress that an SCI entity will experience during a SCI event by instead, allowing it to focus its resources on coping with the immediate situation rather than requiring a practically unending stream of detailed written reports to the Staff. An SCI entity’s management, technology, legal and compliance resources are critical and finite. The Commission should appreciate the finite resources that an SCI entity would have under such circumstances. However, Omgeo understands that it is important that the Commission have timely and accurate information about material SCI events. Omgeo’s suggestions below are intended to provide the Commission and the Staff with a better way of receiving the information they need about SCI events in a

²³ See Proposed Rule 1000(b)(4)(i), which states: “Upon any responsible SCI personnel becoming aware of a systems disruption that the SCI entity reasonably estimates would have a material impact on its operations or on market participants, any systems compliance issue, or any systems intrusion, notify the Commission of such SCI event.”

²⁴ See Proposing Release at 18118, which states: “[e]ven if an SCI entity had notified the Commission of an immediate notification SCI event in writing as would be permitted under proposed Rule 1000(b)(4)(i), the SCI entity would still be required to submit a separate written notification on Form SCI pursuant to proposed Rule 1000(b)(4)(ii).”

timely manner without interfering with SCI entities' ability to cope with and resolve a major systems issue.

B. Rule 1000(b) (4) Should Require Fewer Reports

Omgeo believes that Proposed Rule 1000(b)(4) is not only impractical, but could become detrimental by potentially interfering with the emergency, “firefighting” operations of an SCI entity during a major SCI event by demanding repetitive and detailed written reports thus distracting senior management, and misallocating critical and finite technology, legal and compliance resources from resolving the serious problem of the moment.

Omgeo believes the following is a practical solution that would provide the Commission with the information it needs in a timely manner while not distracting an SCI entity during times of crises. The final version of Rule 1000(b)(4)(i) should require that the Commission be notified as soon as reasonably practicable after responsible SCI personnel became aware of an SCI event. It should also make clear that absent unusual circumstances, oral notice to the appropriate ARP or other Division of Trading and Markets Staff is all that is required. The final Rule should not require that an SCI entity that has provided oral notification to the Commission under Rule 1000(b)(4)(i) subsequently file written notice with the Commission within 24 hours after the initial report pursuant to Rule 1000(b)(4)(ii), unless reasonably requested by the Commission Staff, and the Staff articulates its reasons for making such request. The critical and finite resources of SCI entities should not be used to continuously file reports with the Commission during times of crisis but rather be deployed to resolve the crisis. As currently drafted, Proposed Rule 1000(b)(4) is overly burdensome and could even harm SCI entities and potentially the markets as the SCI entities would be distracted by impractical and burdensome reporting requirements during moments of great pressure.

If prompt written notice is required, Rule 1000(b)(4) should only require a brief written summary within 24 hours of the event. This written notice should only be a paragraph or two long and the final Rule should allow for oral communications to supplement this brief initial written communication. However, after the SCI event has been fully resolved, a detailed written report along the lines set out in Rule 1000(b)(4)(iv) should be required within fifteen business days.²⁵ This would allow sufficient time for the SCI entity to do a post mortem investigation and reach preliminary conclusions about what had happened.

Rule 1000(b)(4)(iii) should only require oral communication during the period the SCI event is ongoing and during the period immediately preceding the SCI event. The final version of Rule 1000(b)(4)(iii) should also allow for written supplements of the final or post mortem report should the SCI entity learn new material information related to the SCI event after the post mortem report is submitted to the Staff.

Omgeo believes that changing the emphasis of the reporting requirements of Proposed Rule 1000(b)(4) from written communication to oral communication during the time period surrounding an

²⁵ In the Proposing Release the Commission recognized the benefits of delay in disseminating information regarding systems intrusions. See Proposing Release at fn. 160, which states in pertinent part: “the Commission recognizes that, in the case of systems intrusions, there may be circumstances in which full prompt dissemination of information to members or participants of a systems intrusion could hinder an investigation into such an intrusion or an SCI entity’s ability to mitigate it. As such, the Commission is proposing that dissemination of information for certain systems intrusions could be delayed in specified circumstances.” Omgeo requests that a similar delay would be appropriate with regard to filing a comprehensive “post mortem” type report regarding an SCI event – especially a significant one.

SCI event will not interfere with the Commission’s stated goals as set out in the Proposing Release of helping:

“ . . . [T]he Commission and its staff quickly assess the nature and scope of an SCI event, and help the SCI entity identify the appropriate response to the SCI event, including ways to mitigate the impact of the SCI event on investors and promote the maintenance of fair and orderly markets. These requirements would help to ensure not only that the Commission and its staff are kept apprised of such SCI events, including their causes and their effect on the markets, but also that the Commission is aware of the steps and resources necessary to correct such SCI events, mitigate their effects on other SCI entities and the market, and prevent recurrence to the extent possible.”²⁶

Furthermore, Omgeo believes the final Rule should include a fairly precise definition of when an SCI event is resolved. This definition should be linked directly to the definition of the SCI event itself. For systems disruptions, for example the definition of resolution would be tied to the recovery of the disrupted system and restoration of a disrupted service, or, in the case of degradation of service delivery, the elimination of the bottlenecks or queuing which created the delays, such that the systems are running and processing within the operational parameters considered “normal” for the SCI system.

C. Proposed Reports of System Intrusions Should be More Limited

As discussed above, the proposed definition of systems intrusion is too broad and does not take into account the many layers of defense an SCI entity may have to repel an attack or limit its impact. Omgeo recommends that the Commission be notified of a systems intrusion solely where the SCI entity reasonably estimates the intrusion would cause a material disruption of service or a malicious unauthorized access to confidential data. Where such an intrusion is not reasonably estimated to cause a material disruption in the SCI entity’s operations or the malicious unauthorized access to confidential data, the SCI entity should be required to make and keep a report, on proposed Form SCI, which would be made available to the Staff during routine examinations or upon request.

D. Proposed Rule 1000(b)(4) Should Have a Safe Harbor for Good Faith Reporting or Failure to Report Systems Disruptions

If adopted, Proposed Rule 1000(b)(4) should include a safe harbor for both SCI entities and their employees and contractors for good faith reporting of SCI events. The Proposing Release is very clear that any written reports submitted to the Commission pursuant to Proposed Rules 1000(b)(4)(ii) and 1000(b)(4)(iii) should be accurate and comprehensive:

“To help ensure that the Commission and its staff receive all information known by the SCI entity relevant to aiding the Commission’s understanding of an SCI event, proposed Rule 1000(b)(4)(iv) would provide that a written notification under proposed Rule 1000(b)(4)(ii) must include all pertinent information known about an SCI event, including: (1) a detailed description of the SCI event; (2) the SCI entity’s current assessment of the types and number of market participants potentially affected by the SCI event; (3) the potential impact of the SCI event on the market; and (4) the SCI entity’s current assessment of the SCI event, including a discussion of the SCI entity’s determination regarding whether the SCI event is a dissemination SCI event or not.”²⁷

²⁶ Proposing Release at 18119.

²⁷ Proposing Release at 18118.

Our request for a good faith safe harbor would be particularly important if the Commission were to adopt Proposed Rule 1000(b)(4) substantially as proposed. In light of the short period of time provided for the initial written report, the detailed nature of the information required for the written report, and the pressures that would arise during any significant SCI event, Omgeo respectfully requests that the final Rule include a safe harbor for both SCI entities and their employees and contractors that have made a good faith attempt to submit accurate and timely reports to the Commission and the Staff. Omgeo is concerned that individuals or SCI entities could be affected, despite their best efforts, by the “fog of war” arising during a significant event and inadvertently leave out or misinterpret information in contemporaneous reports submitted to the Commission.²⁸

The Commission explicitly recognized these pressures in the Proposing Release.²⁹ But the Commission’s solution to this dilemma is to note that the Proposed Rule 1000(b)(4)(ii) requires that details be reported only “to the extent available as of the time of the notification” and also that Proposed Rule 1000(b)(4)(iv) allows an SCI entity to “update any information previously provided regarding the SCI event, including any information required by Proposed Rule 1000(b)(4)(iv)(A)(2) which was not available at the time of the notification made pursuant to Proposed Rule 1000(b)(4)(ii).”³⁰

The Proposed Rule does not allow for mistakes or miscommunications no matter how innocent and how much a product of the confusion and pressures of the moment. A good faith safe harbor would offer this kind of necessary protection to people and SCI entities struggling to resolve an SCI event and provide accurate reporting and communications with the Staff.

Omgeo notes that Proposed Rule 1000(d) would require that all writings submitted to the Staff pursuant to Proposed Regulation SCI, except for notifications to the Commission under Proposed Rule 1000(b)(4)(i) and oral notifications to the Commission under Proposed Rule 1000(b)(6)(ii), must be submitted electronically and contain an electronic signature.³¹ The Commission explained that purpose of this requirement is to provide a uniform manner in which the Commission would receive and SCI entities would provide written reports made pursuant to Proposed Regulation SCI.³² Later in the Proposing Release, the Commission states that another reason for the electronic signature requirement is to help

²⁸ Omgeo would point to the many initial reporting errors made in the immediate aftermath of the terrible bombings in Boston as a good example of how confusion engendered by the pressures of the moment can result in reporting mistakes by even the best intentioned, most dedicated people.

²⁹ Proposing Release at 18119. “At the same time, the Commission recognizes that the information required to be provided to it by an SCI entity about an immediate notification SCI event under proposed Rule 1000(b)(4)(i) would represent the SCI entity’s initial assessment of the SCI event, and that even the written notification on Form SCI required under proposed Rule 1000(b)(4)(ii) may, in some cases, be a preliminary assessment of the SCI event for which the SCI entity may still be in the process of analyzing and assessing the precise facts and circumstances related to the SCI event.”

³⁰ Id.

³¹ See Proposed Rule 1000(d). See also Proposed Rule 1000(d)(2), which states: “[t]he signatory to an electronically submitted Form SCI shall manually sign a signature page or document, in the manner prescribed by Form SCI, authenticating, acknowledging, or otherwise adopting his or her signature that appears in typed form within the electronic filing. Such document shall be executed before or at the time Form SCI is electronically submitted and shall be retained by the SCI entity”

³² Proposing Release at 18129-18130.

ensure the authenticity of the Form SCI submission and thereby expedite communications between the Staff and the SCI entity.³³

Request for Comment 167 asks if the requirement that there be an electronic signature is appropriate.³⁴ Omgeo believes that this request is appropriate provided that the final version of this Regulation SCI includes a good faith safe harbor provision. The requirement that there be an electronic signature and a manual signature could put even a conscientious, well-meaning SCI entity associate at risk if the Staff later determined that there were factual errors, omissions or other flaws in the initial filing done at a moment of crisis.

Omgeo also requests that the Commission provide a safe harbor for the failure to report systems disruptions when responsible SCI personnel make a reasonable determination that no such reporting or dissemination is required and briefly documents the basis for his or her determination. This proposed solution is also supported in certain sections of the Proposing Release, where the Commission gives discretion to SCI entities to determine when a systems disruption should be treated as a dissemination SCI event (although Omgeo believes the definition of dissemination SCI event is too broad and should be similarly amended).³⁵ Without such a safe harbor, Omgeo believes SCI entities, their management, and their associates will feel pressure to over report a great many of these events, out of concern that they will be “second guessed” by the Commission or Staff if subsequent events prove them wrong, resulting in potential violations of the federal securities laws.

V. Proposed Rule 1000(b)(5)

Proposed Rule 1000(b)(5) would require SCI entities to disseminate specified information to members or participants promptly upon responsible SCI entity personnel becoming aware of a dissemination SCI event. Proposed Rule 1000(a) would define a “dissemination SCI event” as an SCI event that is a: (1) systems compliance issue; (2) systems intrusion; or (3) systems disruption that results, or the SCI entity reasonably estimates would result, in significant harm or loss to market participants. As explained in the Proposing Release, the Proposed Rule would permit a limited exception to the prompt dissemination of information due to a systems intrusion, such as where disseminating such information could compromise the investigation or resolution of the systems intrusion.

³³ Proposing Release at 18132.

³⁴ *Id.*

³⁵ Proposing Release at 18104 to 18105, which states: “[f]inally, the Commission is proposing that any systems disruption that results, or the SCI entity reasonably estimates would result, in significant harm or loss to market participants would also be a dissemination SCI event. Some systems disruptions may have an immediate, obvious, and detrimental impact on market participants, hampering the ability of an SCI entity's members or participants to utilize the SCI entity's SCI systems and, in some cases, making such systems unusable. At the same time, the Commission recognizes that disseminating information relating to a single systems disruption that results in harm or loss to one or a small number of market participants that is not significant may not warrant the cost of such dissemination. Furthermore, the Commission preliminarily believes that the proposed standard is appropriate in that it does not set a specific threshold or definition of ‘significant harm or loss to market participants,’ and provides an SCI entity with reasonable discretion in estimating whether a given systems disruption has resulted, or would result, in significant harm or loss to market participants.” (emphasis added).

A. SCI Compliance Issues Should be Disclosed to Members or Participants Solely When They Result in Systems Disruptions or Systems Intrusions

Omgeo believes the proposal to inform members or participants of systems compliance issues would result in unnecessary and even disruptive dissemination of information to the marketplace. Omgeo does not understand why SCI entities should be required to disseminate facts about systems compliance issues that have not resulted, or that are not likely to result in, significant harm or loss to market participants due to a systems disruption or systems intrusion. Omgeo is aware of no general requirement under applicable law to inform an SCI entity's members, participants, or clients of compliance issues affecting the SCI entity. Omgeo is also unaware why an SCI entity's members, participants, or clients would benefit from knowing about a systems compliance issue at an SCI entity. As mentioned above, Omgeo is also concerned that such a requirement would impose on SCI entities the need to inform their members, participants, or clients about legal and regulatory determinations regarding compliance issues, without fully investigating the facts, and without being certain about the likely impact of such events.

Omgeo understands that where an SCI entity has a systems compliance issue that has resulted, or is likely to result in significant harm or loss to an SCI entity's members, participants, or clients due to a systems disruption or systems intrusion, those members, participants, or clients should be made aware of such systems compliance issue, so the member, participant, or client can take necessary action to mitigate harm to itself going forwards. However, imposing a general requirement that SCI entities inform the marketplace, each time the responsible SCI entity personnel become aware of a systems compliance issue, seems unnecessary, and would impose on SCI entities the need to make prompt decisions about whether to notify members, participants, or clients about potential compliance issues without fully investigating the relevant facts or risk violating the federal securities laws.

B. Proposed Rule 1000(b)(5) Should Require Limited Dissemination about Systems Intrusions

Omgeo recommends further that an SCI entity be required to disseminate information about a systems intrusion solely to members, participants, or clients for whom confidential data was disclosed, processing was impacted or where such member, participant, or client can take further action to mitigate the risk of such disclosure. Omgeo believes requiring an SCI entity to disclose non-material systems intrusions to all of its members, participants, or clients would be counter-productive, be of little use to such members, participants, or clients, and would divert critical and finite cyber-defense resources away from more important areas. Systems intrusions which do not cause a material breach or corruption of data or cause any material systems disruption should instead be reported to the Financial Services ISAC and recorded by the SCI entities and made available to the Staff during routine inspections or otherwise upon request.

Omgeo agrees that where an SCI entity reasonably believes dissemination about a systems intrusion may compromise an investigation or otherwise impact the ability of the SCI entity to resolve the systems intrusion, the SCI entity should not disseminate information about the systems intrusion to members, participants, or clients. Once dissemination of information to members, participants, or clients would not likely compromise an investigation or make resolution of the systems intrusion more difficult, the SCI entity should be required to notify materially affected members, participants, or clients as discussed above.

VI. Proposed Rules 1000(b)(6), 1000(b)(7) and 1000(b)(8)

A. Proposed Rule 1000(b)(6)

Proposed Rule 1000(b)(6) would require SCI entities to notify the Commission in writing at least 30 calendar days before the implementation of any planned “material systems change,”³⁶ including a description of the change and the expected dates for commencement and completion of the change.³⁷ In the case of exigent circumstances, or if the information previously provided to the Commission becomes materially inaccurate, the SCI entity would have to notify the Commission as “early as reasonably practical.”³⁸ Notifications would be made using Form SCI.³⁹

In the Proposing Release, the Commission asks at Request for Comment 128 if the Proposed Rule should specify quantitative criteria or other minimum thresholds for the effect of a change on the SCI entities’ systems on the entity’s capacity, security, and operations, beyond which the SCI entity would be required to notify the Commission of the change.⁴⁰ Omgeo believes that rather than providing such quantifiable criteria in the definition of material systems change, the reporting threshold in Proposed Rule 1000(b)(6) should be patterned after the reporting method used in the Proposed Rule for determining when an SCI event should be treated as an SCI dissemination event, or when a systems intrusion must be reported to the Commission. The question of materiality should be determined in the first instance by the SCI entity based on the SCI entity’s own criteria of materiality. The Commission should defer to that judgment as the SCI entity is in the best position with the relevant information to make this determination. The Commission can use the SCI/ARP Program examiners to determine if SCI entities are making responsible and reliable determinations of when a systems change is “material” and must be reported to the Commission pursuant to Proposed Rule 1000(b)(6).

Omgeo believes that the proposed 30 day calendar day requirement for notifying the Commission is generally appropriate. But, it is important to note that the time expended by the implementation team to prepare the notification would to some degree distract important SCI entity personnel away from the critical work of developing, testing and repairing defects in the system changes. An excessive amount of effort expended here would inevitably detract from the SCI entities’ efforts to assure the system changes have sufficient capacity, security, integrity, and resiliency. It would not serve the Commission’s purpose to make the reporting of material systems changes so burdensome that the protections intended by Proposed Regulation SCI are undermined by the actual reporting process.

Rather than require written notification 30 calendar days prior to the change, the Commission should allow SCI entities to advise the Commission of pending changes orally, providing the Commission with the information needed to monitor changes in the SCI systems, and submit the written notification after development and testing is completed and the feature set finalized. This alternative process would

³⁶ A “material systems change” would be defined as “a change to one of more: (1) SCI systems of an SCI entity that (i) materially affects the existing capacity, integrity, resiliency, availability, or security of such systems; (ii) relies upon materially new or different technology; (iii) provides a new material service or material function; or (iv) otherwise materially affects the operations of the SCI entity; or (2) SCI security systems of an SCI entity that materially affects the existing security of such systems.” See Proposed Rule 1000(a).

³⁷ See Proposed Rule 1000(b)(6)(i).

³⁸ See Proposed Rule 1000(b)(6)(ii).

³⁹ See Proposed Rule 1000(b)(6)(iii).

⁴⁰ Proposing Release at 18122..

allow the Commission and the Staff to achieve the goals of Proposed Rule 1000(b)(6) without harming the ability of SCI entities to carry out the essential function of improving, securing and modernizing the technology upon which so much of the activity of the U.S. financial markets depends.

In addition, the Proposing Release states that the Commission considers a significant system change to include, among other things, reconfiguration of systems that cause a variance greater than five percent in throughput or storage.⁴¹ Omgeo believes that a reconfiguration of systems that causes a variance greater than five percent in throughput or storage would be considered an ordinary course of business change that would occur too frequently to be appropriately captured by this notice requirement. In light of the variety of SCI entities and the diversity of their infrastructures, Omgeo recommends that the Commission recognize that SCI entities provide a variety of services to the marketplace with different levels of business impact. Therefore, the Commission should permit each SCI entity to determine a threshold that would capture changes that are material to its systems and impact that entity's core functions and critical operations.

Omgeo is also concerned that the reporting regime for material systems changes under Proposed Rule 1000(b)(6) could be used by the Staff to delay or otherwise interfere with systems changes. The Proposing Release is clear that the purpose of Proposed Rule 1000(b)(6) is to allow the Commission to: "monitor technology developments associated with a planned material systems change."⁴² The Commission should make clear in the final version of this Rule that the Staff cannot use these notices to delay or otherwise influence the decisions of SCI entities to make material systems changes, prior to implementation, absent a determination by the Commission that such changes would likely result in a violation of the federal securities laws. Omgeo believes strongly that Proposed Rule 1000(b)(6) must not become a proxy of sorts for the rule filing process that self-regulatory organizations are obliged to follow.

B. Proposed Rule 1000(b)(7)

Proposed Rule 1000(b)(7) would require each SCI entity to conduct an SCI review of its compliance with Regulation SCI not less than once each calendar year, and submit a report of the SCI review to its senior management for review no more than 30 calendar days after completion of such SCI review.⁴³ Given the wide scope of the definition of SCI review, which is found in Proposed Rule 1000(a), the drafting and reviewing of such a report on an annual basis would impose a heavy burden on all SCI entities, regardless of the degree of a particular SCI entity's compliance with Proposed Regulation SCI.⁴⁴

⁴¹ Proposing Release at 18105.

⁴² Proposing Release at 18122.

⁴³ Omgeo notes that the definition of "SCI review" for this Proposed Rule, which is set forth in Proposed Rule 1000(a), is very broad and would mean a review that would follow established procedures and standards, that is performed by objective personnel having appropriate experience in conducting reviews of SCI systems and SCI security systems, and which review contains: (1) a risk assessment with respect to such systems of the SCI entity; and (2) an assessment of internal control design and effectiveness to include logical and physical security controls, development processes, and information technology governance, consistent with industry standards. In addition, such review would be required to include penetration test reviews of the SCI entity's network, firewalls, development, testing and production systems at a frequency of not less than once every three years.

⁴⁴ This burden would be a significant and is discussed below in the Section X of this letter devoted to analyzing the Commission's burden estimates for Proposed Regulation SCI.

Instead of such a broad, inflexible approach, Omgeo believes that a better solution would be to revise Proposed Rule 1000(b)(7) to make its application more focused and less burdensome to the financial services industry. As noted above, Omgeo believes that SCI entities should take a risk-based approach when reviewing their compliance with Proposed Regulation SCI. This approach would require SCI entities to perform risk assessments and develop appropriate internal controls for SCI systems and SCI security systems, inclusive of appropriate auditing and review of the relevant risk areas. As a result of this effort, Omgeo believes that the annual reporting requirements of Proposed Rule 1000(b)(7) would no longer be necessary in many cases because SCI entities with strong internal controls would have a lower inherent risk profile.

Hence, the proposed annual reports could be mostly supplanted by annual SCI examinations that would examine a particular SCI entity's risk assessments and internal controls for SCI systems and SCI security systems. Provided that the ARP/SCI Staff concluded that the SCI entity had performed a satisfactory risk assessment and had, based on this risk assessment, put proper internal controls in place, an annual SCI report should not be necessary. Only if ARP/SCI Staff concluded that an SCI entity had failed to do both of these things should the annual reports of Proposed Rule 1000(b)(7) be required, and only with respect to those areas that the ARP/SCI Staff found deficient. Omgeo asks the Commission to understand that the burden imposed by Proposed Rule 1000(b)(7) would be significant since it would require an SCI entity to conduct an annual review of substantial scope and size, which for some SCI entities would include areas that may impose little risk to their core operations. This is especially true in light of the other burdens that Proposed Regulation SCI would impose on SCI entities.

C. Proposed Rule 1000(b)(8)(ii)

Proposed Rule 1000(b)(8)(ii) would require each SCI entity to submit a report within 30 calendar days after the end of June and December of each year containing a summary description of the progress of any material systems changes during the six-month period ending on June 30 or December 31, as the case may be, and the date, or expected date, of completion of implementation of such changes. The proposed requirement to submit these semi-annual reports within 30 calendar days of the end of each semi-annual period is designed to ensure that the Commission would have regularly updated information with respect to the status of ongoing material systems changes that were originally reported pursuant to Proposed Rule 1000(b)(6).

The Proposing Release argues that this proposed requirement would simply formalize a practice in place under the current ARP Inspection Program in which senior information technology, audit, and compliance staff of certain SROs prepare such reports in advance of meeting with the Staff periodically throughout the year to present and discuss recently completed systems projects and proposed systems projects. The Proposing Release also asserts that the proposed requirement to submit the semi-annual report within 30 calendar days after the end of the applicable semi-annual period is based on the Commission's experience with the current ARP Inspection Program that 30 calendar days after completion of a report is a sufficient time period to enable senior management to consider such report before submitting it to the Commission.⁴⁵

Omgeo believes that Proposed Rule 1000(b)(8)(ii) should be eliminated and not be part of the final version of Regulation SCI because it is essentially duplicative of the requirements of Proposed Rule 1000(b)(6). As with the duplicative notice requirements in Proposed Rule 1000(b)(4), the Commission should consider the overall heavy burden Proposed Regulation SCI would impose on SCI entities. The Commission should only impose those obligations that are necessary for the successful achievement of Proposed Regulation SCI's stated goals. It should resist any attempts to expand either the scope or the

⁴⁵ Proposing Release at 18124.

burden of Proposed Regulation SCI by including items in the final Rule that are not absolutely required for the new regulatory regime to function soundly.

The Commission notes in the Proposing Release that since Proposed Rule 1000(b)(6) already requires “these reports [on planned material systems changes] to be submitted at least 30 calendar days before implementation,” it did not believe that SCI entities should be made to compile ongoing summary reports. The Commission then expressed concern that a longer period of time (such as on an annual basis) would permit significant updates and milestones relating to systems changes to occur without notice to the Commission.⁴⁶

Omgeo does not understand the Commission’s position on this issue. We feel very strongly that in light of the reports the Commission will receive pursuant to Proposed Rule 1000(b)(6) that Proposed Rule 1000(b)(8)(ii) is completely unnecessary, essentially duplicative, and wasteful of critical and finite SCI entity resources. Omgeo believes that the Staff can take the reports it receives from a particular SCI entity pursuant to Proposed Rule 1000(b)(6) and create compilations for internal use to meet its needs under Proposed Rule 1000(b)(8)(ii). Omgeo believes Proposed Rule 1000(b)(8)(ii) would therefore impose yet one more reporting burden on SCI entities without justification.⁴⁷

VII. Proposed Rule 1000(b)(9)

Omgeo supports the goal of the Proposed Rule 1000(b)(9) to protect the “maintenance of fair and orderly markets” against the disruptive impact of wide-scale disasters. Omgeo believes that the principal “sound practices” noted in the 2003 Interagency “Sound Practices” White Paper⁴⁸ are critical to the achievement of this goal, particularly, as noted in the Proposing Release, developing effective business continuity plans that assure the rapid resumption of the SCI systems, maintaining geographic diversity in the business continuity arrangements, and regularly exercising those arrangements through active testing of the business continuity plans. Omgeo agrees that all SCI entities should be required to implement these practices and comply fully with the terms of the Interagency White Paper.

Omgeo also supports the goal of widespread participation in these tests, both among the users of the SCI systems, and across industry segments and sectors. This follows from the basic principles articulated in the Interagency White Paper, particularly that regular exercise of business continuity arrangements is necessary to assure that those arrangements will be effective when an actual wide-scale disaster or disruption happens. However, as further discussed below, Omgeo objects to the newly proposed mandate that SCI entities enforce these sound practices among their participants, members and customers as unworkable and ultimately ineffective at meeting these goals.

⁴⁶ Id.

⁴⁷ Omgeo notes that Proposed Regulation SCI is not being promulgated in isolation, but is only one of an increasing number of new rules and regulations whose cumulative burden on the financial services industry is quite heavy. Omgeo asks that the Commission and the Staff understand that firms in the financial industry have finite resources and that great thought and consideration should be used before imposing yet more burdens on such firms. The Commission asks in the Proposing Release if the requirements of Rule 1000(b)(8) are cost effective. The answer for Proposed Rule 1000(b)(8)(ii) is that they are not cost effective for the reasons given in the text above.

⁴⁸ See Interagency White Paper.

Proposed Rule 1000(b)(9)(i) would require SCI entities to mandate participation by designated members or participants in scheduled functional and performance testing of business continuity and disaster recovery plans, including backup systems, at least once every 12 months. While Omgeo agrees that SCI entities should actively encourage their users to participate in business continuity testing, such a mandate is impracticable, given that many SCI entities, like Omgeo, are not SROs, and lack the ability to enforce such a mandate – particularly with regard to certain, large, critical clients. The rules based SRO have the ability to change their rules to require business continuity testing that other SCI entities do not have.

Omgeo has a very active program to encourage users to participate in its disaster recovery exercises and does engage designated firms to promote this participation. However, the level of such participation has typically been 20% of our targeted high volume client base. We strongly encourage our clients to participate in such tests but as an exempt clearing agency we have no way to force clients, particularly large, critical clients, to participate in such exercises. With regard to Omgeo’s disaster recovery exercises, many clients lack the band-width or the requisite priority of this kind of testing. Without a requirement applicable to the market participants themselves, which would require our clients to participate, or free market mechanisms which would create the self-interest to persuade clients to participate voluntarily, Omgeo cannot, as a practical matter, enforce the requirements of the Proposed Rule.

Rather than requiring SCI entities to mandate and enforce participation in its tests among their participants, members and clients, the Commission should itself enforce this mandate. Omgeo agrees with the Commission that priority should be given to those members, participants, or clients whom the SCI entity believes are essential to the successful exercise of the business continuity arrangements. However, requiring the SCI entities to “designate” such participants or clients by name to the Commission is antithetical to the free operation of the markets and is a barely disguised form of “white listing” that may be in fact viewed unfavorably by participants and clients.

Also, it should not be up to SCI entities to declare certain firm’s essential and other firm’s non-essential to the maintenance of fair and orderly markets. Rather, Omgeo believes that the Commission should establish objective criteria for determining which firms are significant in this way – much as the Commission did with the other financial regulatory agencies in the Interagency White Paper. For example, the Commission could give priority in enforcing participation in SCI entity business continuity testing among firms defined to be “significant” – those firms who process five percent or more of the value of transactions in a given market.

Omgeo is also concerned about the requirement of Proposed Rule 1000(b)(9)(i) that designated members and participants must participate in both scheduled functional and performance testing at least once every 12 months. Omgeo strongly believes that imposing both functional and performance tests on SCI entities and their participants, members or customers would be a huge undertaking for the financial services industry. A “functional test” is “testing as to whether a system operates in accordance with its specifications.”⁴⁹ To require a full functional test across all primary and recovery data centers for any significant number of participants, members or customers could only be properly done on a large-scale industry level. To do it properly may require market downtime in order to reasonably test critical combinations of dependencies. When our customers send in trade records during a Disaster Recovery test, they are not testing that the system operates in accordance with its specifications, but rather they are

⁴⁹ When Omgeo conducts functional tests in our functional quality assurance systems, Omgeo validates all of the relevant specifications. Omgeo’s quality assurance test plans typically include hundreds of tests and thousands of test runs.

testing merely to confirm that the full system was fully recovered. If the system is not fully recovered, then the workflow would not complete from start to finish.

This is a very different proposition than functional testing. Actual functional testing would take many hours, possibly days, for the clients, members or participants to perform, and involve hundreds, or even thousands of test runs. Such an extensive test is simply not possible to complete during a typical Disaster Recovery testing window.

Similar difficulties are raised by performance testing – which can be defined as testing “whether a system is able to perform under a given workload.” Once again, such a test, which would test if a system performs particular workloads at pre-defined target performance levels, would be a large, expensive and difficult undertaking for any particular SCI entity and its participants, members or customers. Again, a true performance test could not be done during a Disaster Recovery test, at least as they are now done by the industry. Based on its experience, Omgeo strongly believes that there is simply not enough time during Disaster Recovery testing as they are now conducted by the industry to do real end to end performance testing.⁵⁰

Omgeo believes that with regard to the Proposed Rule the Commission should focus on “smoke testing”⁵¹ – a more limited form of testing to validate that, with respect to the goals of functional testing, the system functionality is fully deployed and operational in the new recovered or resumed production environment. Such tests would include, with respect to the goals of performance testing, a more limited set of system operations to assure that the recovery system would perform those operations at roughly comparable speeds as those performed on the main production systems. In both cases, the purpose of these tests would be to validate that the backup or recovery systems have the necessary functionality to perform the service required of the SCI systems, and have sufficient capacity to process the production workloads at roughly comparable levels of performance, rather than to test the actual functional or performance characteristics of the backup or alternate recovery systems in their own right.⁵²

Proposed Rule 1000(b)(1)(i)(E), pertaining to business continuity and disaster recovery plans, would also require SCI entities to ensure “next business day resumption of trading and two-hour resumption of clearance and settlement services following a wide-scale disruption.” This Proposed Rule is explicitly based on the Interagency White Paper, but narrows the time frame for resuming clearance and settlement services from “within the business day” to two hours. While Omgeo agrees that SCI

⁵⁰ Such testing is quite resource intensive if done properly. Although Omgeo experiences no downtime when it does performance testing it is very aware of the amount of resources being used at that moment in time. Omgeo’s wholly internal performance tests of its systems can take many days, extending in some cases into multiple weeks to complete. Moreover, it often takes several additional days for the results of such tests to be compiled and conclusions drawn.

⁵¹ “Smoke Testing” is a form of testing, derived from the plumbing industry to provide assurance that newly assembled or repaired pipes do not contain leaks or catastrophic failures, designed narrowly to provide assurance that a newly deployed, upgraded, or recovered system will not catastrophically fail.

⁵² If the Commission believes that true functional and performance testing is required, it should convene an industry task force to study potential testing scenarios, their value and impact. Only after the task force has completed its review should a decision be made to mandate such testing. Omgeo believes that if the Commission seeks to impose true functional and performance testing on SCI entities and their members, participants and clients it needs to understand that large scale industry wide planning will be needed.

entities should be required to rapidly recover from a wide-scale disruption and resume operations to avoid disrupting the critical markets beyond a single business day, it is unreasonable to require these operations to be resumed within two hours. The Interagency White Paper itself recognizes that “various external factors surrounding a disruption such as time of day, scope of disruption, and status of critical infrastructure — particularly telecommunications — can affect actual recovery times,” and concludes that “[r]ecovery-time objectives provide concrete goals to plan for and test against. They should not be regarded as hard and fast deadlines that must be met in every emergency situation.”

The Interagency White Paper therefore requires core clearing and settlement organizations to resume within the business day with a goal, rather than a requirement, to resume within two hours. Omgeo believes that Commission’s reasoning in the guidelines issued in 2003 is still relevant today. Proposed Regulation SCI appears to support this as well, as it proposes to designate the Interagency White Paper, along with the 2003 Policy Statement on Business Continuity Planning for Trading Markets, as “industry standards in the context of contingency planning.”⁵³ Omgeo objects to the reduction in the Recovery Time Objective to two hours and requests that the Commission endorse its current standard of “within the business day.”

Furthermore, the Commission should clarify the meaning of “business day” in Proposed Regulation SCI. SCI entities such as Omgeo operate on a global basis and process transactions relating to trading, clearance and settlement, order routing, market data, regulation or surveillance in multiple markets. Thus, Omgeo’s operations “follow the sun” and operate continuously without a specific end of business day. The Commission should therefore clearly define the meaning of “next business day” or “within the business day” within the context of both global and local operations.

VIII. Analysis of Proposed Rule 1000(f)

Proposed Rule 1000(f) would require each SCI entity to provide Commission representatives with reasonable access to its SCI systems and SCI security systems to allow Commission representatives to assess the SCI entity’s compliance with the Proposed Rule. Omgeo believes such a requirement is unnecessary to fulfill the purposes of the Proposed Rule. Omgeo also believes that if such access is required, the Commission should explicitly state that Commission representatives will not operate or directly interact with an SCI system or SCI security system, but rather that a Commission representative may require a demonstration by the SCI entity, upon reasonable request, showing how the SCI entity’s implementation of its policies and procedures, adopted pursuant to Proposed Rule 1000(b)(2), as well as the SCI entity’s reporting and recordkeeping pursuant to Proposed Regulation SCI, are consistent with the Proposed Rule.

Proposed Rule 1000(b)(2) requires an SCI entity to establish, maintain, and enforce written policies and procedures reasonably designed to ensure that its SCI systems operate in the manner intended, including in a manner that complies with the federal securities laws and rules and regulations thereunder and the entity’s rules and governing documents, as applicable. Commission representatives should not need direct access to SCI systems to audit the SCI entity’s compliance with that Proposed Rule. Instead, Commission representatives should be able to conduct an audit of the SCI entity’s compliance through a review of a description of its SCI systems, the applicable policies and procedures, interviews with SCI entity personnel and records kept on file or reports filed with the Commission. If necessary, Commission representatives may request an independent audit of the SCI entity’s SCI systems.

⁵³ See Proposing Release at fn. 183; see, also, Securities Exchange Act Release No. 48545 (September 25, 2003), 68 FR 56656 (October 1, 2003) (Business Continuity Planning for Trading Markets).

This method has worked well under the ARP Inspection Program, and Omgeo does not see any reason to change it under the Proposed Rule.

Omgeo is particularly concerned about the Commission's explanation for the need for direct access to SCI systems by Commission representatives. The Proposing Release states that Proposed Rule 1000(f) is intended to be consistent with the Commission's current authority with respect to access to records generally, and help ensure that Commission representatives have ready access to the SCI systems and SCI security systems of SCI entities in order to evaluate an SCI entity's practices with regard to the requirements of Proposed Regulation SCI.⁵⁴ Omgeo does not dispute the Commission's access to the records of SCI entities, nor does Omgeo dispute the value of the Commission having direct access to such records. However, the Commission cites as an example of the proposed use of Proposed Rule 1000(f), the ability of Commission representatives to test an SCI entity's firewalls and vulnerability to intrusions.⁵⁵ Omgeo is concerned that allowing Commission representatives direct access to test SCI systems and SCI security systems, without the necessary training and experience with those systems, may lead to unintended consequences, including damage to such systems. Omgeo therefore recommends that, rather than requiring SCI entities to allow Commission representatives access to SCI systems and SCI security systems, the Commission require an SCI entity, upon reasonable request, to demonstrate to the Staff that its systems are operating in the manner intended, in compliance with the Proposed Rule.

Finally, Omgeo believes that allowing Commission representatives direct access to SCI systems would introduce new and unnecessary risks into the current ARP Inspection Process – under which ARP examiners do not have direct access to a firm's computer systems. In addition to the risk of damages to such systems noted in the preceding paragraph, Omgeo believes that such access could pose a security risk to SCI entities, particularly with regard to confidential client information. In addition, Omgeo believes that foreign regulators may be concerned if an entity of the United States government had access to confidential client information. Omgeo believes that the final version of Regulation SCI should not have this provision. Allowing Commission representatives direct access to SCI systems would present both an operational and security risk and burden to SCI entities and will offer the Commission no real value since its representatives can currently ask for anything today and get it.

IX. Recommended Change to Exhibit 1 of Form SCI

As proposed, Exhibit 1 of Form SCI would require that an SCI entity submit “an analysis of the parties that may have experienced a loss, whether monetary or otherwise, due to the SCI event, the number of such parties, and an estimate of the aggregate amount of such loss.”⁵⁶ The Commission should not impose such a requirement in the final version of Regulation SCI for the following reasons.

First, there will be many SCI events in which such a calculation will be quite difficult to make within any degree of accuracy. A good example of this is the dispute between NASDAQ and large broker-dealers about the losses allegedly suffered due to the processing errors of the Facebook IPO.⁵⁷ As

⁵⁴ See Proposing Release at 18130.

⁵⁵ See Proposing Release at fn. 284.

⁵⁶ See Proposed Form SCI (17 CFR 249.1900).

⁵⁷ See, e.g., letter from Joan C. Conley, Senior Vice President and Corporate Secretary, NASDAQ OMX to Elizabeth M. Murphy, Secretary, Commission (December 7, 2012), responding to amount losses claimed by various firms due to technical glitches during Facebook IPO at <http://www.sec.gov/comments/sr-nasdaq-2012-090/nasdaq2012090-23.pdf>.

a result, submitting such an analysis would ultimately be of little benefit to the Commission or the SCI entity. Second, even if this analysis were completely accurate, it is unclear how it would help achieve the stated purposes of Proposed Regulation SCI. What is important to the Commission should be whether an event had a material impact on market participants. While the size of the loss could be an indication of materiality, there are other factors the Commission could use in its analysis of this issue.

Finally and perhaps most importantly, requiring SCI entities to make and submit such calculations would force them to essentially build civil cases against themselves. A court may well determine that such a calculation should be discoverable in any subsequent law suit despite the best efforts of the Commission to prevent an SCI entity's Form SCI submission from becoming part of a legal proceeding. It makes no sense to needlessly impose this kind of commercial risk on SCI entities – firms that by their very nature are integral parts of the U.S. markets infrastructure and whose possible losses or even insolvency resulting from legal proceedings would certainly threaten market efficiency and the fair and orderly functioning of the U.S. markets.

Omgeo also wishes to point out that this aspect of Proposed Regulation SCI conflicts with the Commission's objectives in adopting new Rule 17Ad-22 in accordance with Section 17A of the Exchange Act.⁵⁸ Specifically, although Exchange Act Rule 17Ad-22 applies to registered clearing agencies and not to exempt clearing agencies such as Omgeo, we note that the Commission was clear when it proposed and adopted Exchange Act Rule 17Ad-22 that registered clearing agencies had to control their legal risks.⁵⁹

As noted, SCI entities, which include registered clearing agencies, are important parts of the U.S. market infrastructure. As demonstrated above, Exchange Act Rule 17Ad-22 requires registered clearing agencies to be aware of and manage their overall legal risks. However, this provision of the Proposed Rule would do exactly the opposite – it would force SCI entities, including Registered Clearing Agencies, to increase their overall legal risks in a variety of ways. This aspect of Proposed Regulation SCI must be revised or the Commission will impose substantial legal risks on every firm it has designated as an SCI entity.

X. Analysis of the Commission's Burden Estimates for Proposed Rules 1000(b)(1), 1000(b)(2), 1000(b)(4), 1000(b)(5), 1000(b)(6), 1000(b)(7), 1000(b)(8), and 1000(b)(9)

The Commission's estimates for the burdens of Proposed Rules 1000(b)(1), 1000(b)(2), 1000(b)(4), 1000(b)(5), 1000(b)(6), 1000(b)(7), 1000(b)(8), and 1000(b)(9) are too low.

⁵⁸ See Securities Exchange Act Release No. 68080 (October 22, 2012), 77 FR 66220 (November 2, 2012) (adopting clearing agency standards) "Clearing Agency Standards Release").

⁵⁹ See, e.g., Clearing Agency Standards Release at text around fn. 292 ("We believe that well-founded, transparent and enforceable policies and procedures established to underpin a clearing agency's operational and business activities are essential to reduce **legal risks** and enhance a clearing agency's ability to facilitate the prompt and accurate clearance and settlement of securities transactions and safeguard securities and funds as required for the protection of investors by Section 17A of the Exchange Act." (emphasis added)). See also Securities Exchange Act Release No. 64017 (March 3, 2011), Federal Register 14472, at 14484 (March 16, 2011) (Release Proposing Clearing Agency Standards for Operation and Governance). ("The clearing agency should have written policies and procedures in place that, at a minimum, address the significant aspects of a clearing agency's operations and risk management in order to provide a well-founded legal framework and must be clear, internally consistent, and readily accessible by the public in order to provide a transparent legal framework."). *Id.*

A. Burden Estimates for Proposed Rules 1000(b)(1) and 1000(b)(2)

Proposed Rule 1000(b)(1) would require that each SCI entity's policies and procedures be reasonably designed to ensure that its SCI systems and, for purposes of security standards, SCI security systems, "have levels of capacity, integrity, resiliency, availability, and security, adequate to maintain the SCI entity's operational capability and promote the maintenance of fair and orderly markets." Proposed Rule 1000(b)(2) would require that each SCI entity "establish, maintain, and enforce written policies and procedures reasonably designed to ensure that its SCI systems operate in a manner intended, including a manner that complies with the federal securities laws and regulations thereunder and the entity's rules, procedures and governing documents, as applicable."

1. Estimates for Proposed Rule 1000(b)(1)

Omgeo is fully supportive of the requirement to have standards-based policies and procedures intended to help ensure high levels of capacity, integrity, resiliency, availability and security. However, Omgeo believes that the Commission's estimates on the effort required to implement such standards for an SCI entity are both inaccurate and inadequate. This is particularly true for an SCI entity that has not previously participated in the ARP Inspection Program, which would have significant ramp up, development and compliance costs.

The Commission states with regard to Proposed Rule 1000(b)(1) that it "preliminarily estimates that an SCI entity that has not previously participated in the ARP Inspection Program would require an average of 210 burden hours to develop and draft policies and procedures reasonably designed to ensure that SCI systems and, for purposes of security standards, SCI security systems, have levels of capacity, integrity, resiliency, availability and security."⁶⁰ The Proposing Release also estimates that the 29 SCI entities that currently participate in the ARP Inspection Program would start from a baseline of 50 percent and thus be able to draft and implement such procedures with only 105 burden hours of effort.⁶¹ These estimates are far too optimistic and inadequately represent the time burden on SCI entities.

First, Proposed Rule 1000(b)(1) is by its very nature complex because the technology systems it is seeking to regulate are complex.⁶² In addition, the Proposed Rule as drafted has multiple parts with multiple requirements and therefore multiple obligations. To illustrate, the Proposed Rule does not simply seek to have SCI entities adopt policies and procedures regarding the capacity of its SCI systems (which as discussed above is broadly defined) and also SCI security systems (which are also very broadly defined), but would also require that such policies and procedures address the additional issues of integrity, resiliency, availability, and security. Moreover, these policies and procedures must be adequate to maintain the SCI entity's operational capability and promote the maintenance of fair and orderly

⁶⁰ Proposing Release at 18145.

⁶¹ Id.

⁶² It is not only the technology that is complex but also the tasks that the technology is designed to address. For example, because of the way the Commission defines "matching," trades could be traded or settled in many non-US markets and still be considered "U.S. Matches" for the purposes of Proposed Regulation SCI. Therefore the SCI systems related to matching must be written (i.e., coded) to operate in a variety of markets and comply with many local market practices and rules, as well as global market practices and rules. Additionally, these practices and rules vary by asset class and instrument type. Because the markets are complex, with a wide range of practices and rules, instruments and workflows, and few true international standards, the systems must also be highly complex to function in such a complicated international environment.

markets. This one proposed rule would therefore require SCI entities to draft comprehensive policies and procedures for complex technology systems, systems which operate in dozens of jurisdictions around the world, that address seven very difficult operational domains: (1) capacity, (2) integrity, (3) resiliency, (4) availability, (5) security, (6) operational capability, and (7) promoting the maintenance of fair and orderly markets. Omgeo respectfully submits that a first draft of policies and procedures for such a large, complicated project would take far more than 210 hours to complete.⁶³

Second, the estimate of 210 hours of effort per SCI entity is unrealistic because such an effort would include not only the drafting of all the required policies and procedures, but also their review and approval by senior management. It also is inaccurate because of its mistaken assumption that SCI entities would not seek guidance from outside consultants and attorneys.⁶⁴ Omgeo has a fiduciary duty to its shareholders to manage its business in a responsible way which would require the review of any new policies and procedures that have such a material impact on the services it provides by outside consultants and attorneys to make sure they are compliant with the Proposed Rule. The Commission's estimates for the Proposed Rule appear to be the product of "best case scenario" thinking. The operating assumption seems to be that only one draft will be required and that management sign-off will be a simple process. Also, the Commission assumes that there will be no need to seek expert advice for the many complicated issues that will arise during the process of drafting and implementing these policies and procedures. Practical experience has taught Omgeo that these assumptions are wrong.

In reality, from Omgeo's direct experience in creating such policies, a large number of drafts will be required and multiple levels of management and operational personnel will be heavily involved in this drafting. Senior managers will have to provide ongoing direction and feedback to midlevel managers and their subordinates. Expert advice from law firms and consulting firms may be repeatedly sought in order to ensure the policies and standards are able to be effectively implemented with regard to all of the complicated technology, operational, compliance, and legal issues that SCI entities would have to resolve in order to fully comply with the requirements of Proposed Rule 1000(b)(1).⁶⁵

⁶³ The Proposing Release also estimates that each SCI entity that has not previously participated in the ARP Inspection Program will spend approximately 60 hours a year reviewing and amending these policies and procedures to ensure they are up-to-date. SCI entities that are currently participating in the ARP Inspection Program will be expected to perform the same tasks within 30 hours. See Proposing Release at 18146. Given the complexity of the underlying systems and the requirements of Proposed Rule 1000(b)(1), Omgeo believes that significantly more effort and time will be required to comply with the Proposed Rule.

⁶⁴ Id. at 18145. "The estimated 210 hours required for such entities would include the time expended to draft relevant policies and procedures and the time expended for review of the draft policies and procedures by the SCI entity's management. The Commission preliminarily believes that all SCI entities would conduct this work internally."

The Proposing Release then explains that to the degree an SCI entity chooses to consult an outside law firm or consultant each SCI entity would spend approximately \$20,000 on such outside advice. (See Proposing Release at fn. 373). Given the rates charged by large law firms and consulting firms in the commercial centers where most SCI entities are based, this estimate seems quite low. Omgeo believes that an estimate of approximately \$100,000 per SCI Entity is more realistic – at least for exempt clearing agencies.

⁶⁵ This analysis also applies to those SCI entities that already participate in the ARP Inspection Program. The Proposing Release also states it believes these 29 SCI entities "would conduct this work internally" (See Proposing Release at 18145). Again, for the reasons stated above, Omgeo also believes that the estimate of \$20,000 per SCI entity for outside legal/consulting advice is not realistic.

Based on recent experience, Omgeo knows that the process of drafting, reviewing and approving complicated technical standards and the implementation of the necessary support framework is an expensive and labor intensive enterprise. The standards Proposed Regulation SCI seeks to impose would need to be tailored to the particular risks and operational models of each SCI entity. Most importantly, even more so than the creation of the standards, an operational framework for evaluation of controls and implementation details against standards, risk assessments, approval processes, training, and integration with operational processes would need to be implemented to support the standards. A great deal of effort would be required to do this in a credible, competent way – far more than 210 hours.

For example, the implementation of Omgeo’s current information security policy framework and related standards took approximately 18 months and over 1600 work hours to put in place. This initiative required regular input from mid-level and senior operational management. The Commission’s estimate includes just the drafting and multiple reviews of several hundred security standards as well as the development of the necessary operational framework to regularly review technology against the standards and properly risk review the findings. Significantly, this estimate does not include the ongoing operational costs of regularly reviewing components against the standards and regularly reviewing and updating the standards and ensuring standards stay aligned with changes in the reference framework. This estimate only includes information security policies and standards. The task Proposed Rule 1000(b)(1) would impose on Omgeo is far bigger and would be far more labor and resource intensive. Security is just one of the proposed seven areas of policy and standards development this new Rule would require.

Proposed Rule 1000(b)(1) appears to attempt to reduce its costs by allowing SCI entities to use “information technology practices that are widely available for free.” The Proposed Rule states that standards from a “widely recognized organization” will be acceptable, but the preponderance of standards examples given in the Proposing Release are targeted at U.S. “Federal Information Systems.” Omgeo believes, however, the Commission should not give a preference to U.S. government standards and frameworks over standards that are more appropriate for private sector firms. The publications referenced in the Proposing Release contain excellent information, but these publications are not necessarily entirely applicable for non-Federal, commercial systems deployed to financial services firms internationally.

Omgeo, like many financial services firms, services clients internationally and models aspects of its program on widely accepted international standards and frameworks such as ITIL and ISO 27000, which are licensed and not “available for free.” Omgeo feels strongly that cost or lack thereof of a technology standard or standard framework has no bearing on the quality or appropriateness of such standard or framework and bears no significance to the maintenance of fair and orderly markets. Requiring SCI entities to use “practices that are widely available for free” places an unreasonable limitation on SCI entities with little perceived added value.⁶⁶ Whether for free, licensed or internally developed, SCI entities should be able to implement the most appropriate and relevant practices for properly maintaining the capacity, integrity, resiliency, availability and security of their systems.

⁶⁶ Omgeo understands that the Commission is justifiably concerned about the costs Proposed Regulation SCI would impose on SCI entities and ultimately investors. As discussed in detail above, Omgeo believes the burden of Proposed Rule 1000(b)(1) is far higher than the Commission estimates. That said, Omgeo believes that it is not realistic to attempt to address the high costs of the Proposed Rule by simply permitting SCI entities to use “free” technical standards. The truth is that the best software to accomplish the purposes of Proposed Regulation SCI is not free. Omgeo asks that the Commission recognize this important fact in its cost estimates.

In addition, the referenced standards have not necessarily been as widely recognized or supported as other standards. For example, the 1995 British standard BS7799 was long regarded as the foremost Information Security Management Standard and was the foundation for the internationally recognized ISO 27000 series of standards, which are currently the most widely recognized standard framework in this space. Omgeo believes that preferential treatment for free, U.S. based standards is not in the best interests of the financial markets. SCI entities should be able choose the most relevant standards to their particular operations and, if such standards don't exist or have not maintained pace with technological changes, SCI entities should be free to develop their own standards to meet the requirements. The fact that many, if not most, of the relevant, appropriate standards must be paid for should be included in the cost estimates for Proposed Rule 1000(b)(1).

2. Estimates for Proposed Rule 1000(b)(2)

The Proposing Release estimates that each SCI entity, whether it currently participates in the ARP Inspection Program or not, will spend approximately 180 hours designing their policies and procedures to comply with the requirements of Proposed Rule 1000(b)(2). The Commission also estimates that each SCI entity that is an SRO will spend an additional 120 hours per year to review these policies and procedures and amend them as necessary to ensure they are up-to-date, and SCI entities that are not SROs will require 60 hours to perform the same function.⁶⁷ These estimates will include the time expended by senior management at each SCI entity reviewing the draft policies and procedures under Proposed Rule 1000(b)(2).⁶⁸

Omgeo believes these estimates are far too low for the following reasons. First, as argued in the previous section, the technology systems that these policies and procedures are intended to cover are complicated and thus will require the drafting of complicated policies and procedures. As a result, the time and effort required to draft policies and procedures “reasonably designed” to comply with Proposed Rule 1000(b)(2) would be significantly more than 180 hours. Second, the breadth of Proposed Rule 1000(b)(2) requires that the policies and procedures it mandates be extremely comprehensive. Specifically, Proposed Rule 1000(b)(2) states that these policies and procedures must be designed to ensure that a firm’s SCI systems operate “in the manner intended.” The Proposing Release is vague about the exact meaning of this phrase, but it is clearly meant to be wide in scope, which will in turn require extensive and broad policies and procedures.

Proposed Rule 1000(b)(2) would also require that the policies and procedures ensure the SCI systems “comply with the federal securities laws and rules and regulations thereunder.” While Omgeo appreciates the Commission’s desire to have SCI entities fully comply with the federal securities laws, we do not believe that Proposed Regulation SCI is the appropriate vehicle to enforce such broad compliance. As explained elsewhere in this letter, Omgeo recommends that the Commission resist the urge to transform the ARP Inspection Program from an effort focused on technology, integrity and security issues to one that is more broadly focused on general compliance issues.

In addition to the objections to such an approach made elsewhere in this letter, Omgeo believes that such a broad mandate would certainly increase the costs of drafting the required policies and procedures. To force SCI entities to address all of their compliance issues via Proposed Rule 1000(b)(2) would require far more than 180 hours for the initial drafting, review and adoption of these policies and procedures -- plus either 120 or 60 hours, depending on whether the SCI entity is an SRO or not, for keeping these policies and procedures up-to-date. In addition, Omgeo does not believe the required

⁶⁷ Proposing Release at 18146.

⁶⁸ *Id.* at 18147.

review and direction of senior managers is reflected in the Commission's estimates. Finally, Omgeo believes that Proposed Rule 1000(b)(2) once again fails to account for the true costs associated with using outside counsel or an outside consulting firm to help draft the policies and procedures the Proposed Rule would require.⁶⁹

B. Burden Estimate for Proposed Rule 1000(b)(4)

1. Estimates for Proposed Rule 1000(b)(4)

Omgeo believes that the Commission's estimates on the number of SCI events, and most importantly the burden hours each SCI event would impose on SCI entities, are far too low and must be dramatically revised upwards.

As demonstrated above, the proposed definition of SCI events is so broad as to potentially transform almost any non-standard event into a reportable SCI event under Proposed Regulation SCI. Omgeo believes, as a result of this overly broad definition, it is likely that each SCI entity could in fact have hundreds if not thousands of SCI events on an annual basis. Under Proposed Regulation SCI, many of these SCI events would require written notification even though the vast majority of them would be minor and immaterial. The reporting of so many SCI events would be burdensome for both SCI entities and also for the Staff, who would be required to review and evaluate these reports. Importantly, neither the Commission nor the financial markets would receive any benefit from all of this activity. Absent clear materiality standards in the final Rule, it would be difficult for the Staff to determine which reports bear further review or require follow-up.

For example, Proposed Rule 1000(b)(4)(ii) would require an SCI entity, within 24 hours of any responsible SCI personnel becoming aware of any SCI event, to submit a written notification to the Commission on Form SCI pertaining to such SCI event. The Commission estimates that each SCI entity would experience approximately 65 SCI events a year and that each event will require an average of 20 burden hours, with a compliance manager and in-house attorney each spending approximately 10 hours in collaboration to draft, review, and submit the report. Thus, each SCI entity would have a burden of approximately 1,300 hours a year (20 hours times 65 events).⁷⁰ This estimate is not accurate and presents an unrealistically optimistic view of the work that will be required to comply with the Proposed Rule.

As demonstrated in detail below, Omgeo respectfully submits that the burden estimates for Proposed Rule 1000(b)(4) are far too low. As a prudent business practice, senior management of SCI entities would want any SCI event to be investigated before such event is reported to the Commission. Any responsible Chief Administrative Officer, Chief Financial Officer, Chief Operations Officer, Chief Compliance Officer, Chief Information Security Officer, or General Counsel would also want to review any report on a SCI event prior to its submission to the Commission. The same will be true for responsible compliance attorneys or compliance officers who would actually prepare and submit such reports to the Commission.⁷¹ Additionally, in many instances, the SCI entity would need to engage

⁶⁹ *Id.* The Commission stated it believes that SCI entities would initially handle most of the work necessary for complying with this Proposed Rule internally, though it does allow for some costs associated with consulting outside experts. But again, for reasons set out in the previous section, these costs are too low and must be increased in the estimates for the final version of Regulation SCI.

⁷⁰ Proposing Release at 18149.

⁷¹ As the Commission is aware, the licensing or other applicable legal or regulatory requirements that each attorney or compliance officer must comply with would cause them to act in a prudent manner and verify the information being reported to the Staff.

outside counsel and possibly other parties to review such reports -- significantly increasing compliance and legal costs.

To help the Commission draft more accurate cost estimates for Proposed Rule 1000(b)(4), Omgeo has outlined below the estimated burden associated with the filing of just a single report. Omgeo believes that each SCI event would impose a burden of 89.5 hours. Thus, even if Omgeo, due to the extremely broad definition of SCI event, only had 100 SCI events in a year, compliance with Proposed Rule 1000(b)(4) would impose an annual burden of 8,950 hours a year instead of the 1,300 hours estimated in the Proposing Release. Omgeo believes that other SCI entities would have similar burdens.

Omgeo estimates that each SCI event requiring reporting under Proposed Rule 1000(b)(4)(ii) will require approximately five hours of senior management time, including review and discussions between the Chief Administrative Officer, the Chief Compliance Officer, the Chief Information Officer, the Chief Operating Officer, and the General Counsel. In addition, Omgeo estimates that middle managers from its Compliance, Legal, Technology, Product, and Information Security functions would spend on average approximately 31 hours per SCI incident. Finally, Omgeo estimates that associates from its Compliance, Legal, Technology, Product, and Information Security functions will spend approximately 53.5 hours per SCI event.

In addition to the burden that will be imposed complying with Proposed Rules 1000(b)(4)(i) and 1000(b)(4)(ii), SCI entities would also have to incur the additional burden of complying with Proposed Rule 1000(b)(4)(iii). To comply with Proposed Rule 1000(b)(4)(iii), the Commission preliminarily estimates that, on average, each SCI entity would submit five updates per year under Proposed Rule 1000(b)(4)(iii), and that each update would require an average of three burden hours, with a compliance manager and in-house attorney each spending approximately 1.5 hours in collaboration to draft, review, and submit the update. Using these numbers, the Commission estimates that Proposed Rule 1000(b)(4)(iii) would impose a burden of 15 hours a year on each SCI entity.⁷²

This estimate is too low. The Commission never explains why only five updates would be required per year. Omgeo believes that, given the broad manner in which Proposed Regulation SCI has been drafted, an SCI entity would have to update its submission pursuant to Proposed Rule 1000(b)(4)(iii) much more often than five times per year. As stated above, the breadth of the definition SCI event would quite likely require each SCI entity to file hundreds of Form SCIs per year.

Even if Omgeo had to file a Form SCI only 100 times a year, Omgeo believes that Proposed Rule 1000(b)(4)(iii) could conceivably require Omgeo to update the Commission approximately half of the time it files such a form. Thus, Omgeo would have to file approximately 50 updates a year with the Commission. Omgeo estimates that each update would result in additional burden hours broken down along the following lines – one hour of senior management time, 17 hours of middle management time, and 9 hours of associate time per update. Omgeo estimates that simply to comply with the updating requirement of Proposed Rule 1000(b)(4)(iii) would impose a burden of 1,350 hours a year on it rather than the 15 estimated by the Commission. Hence, should Omgeo experience only 100 SCI events in a year, it estimates its total burden hour for complying with the requirements of Proposed Rule 1000(b)(4)(iii) would be 10,300 hours (8,950 hours plus 1,350 hours). As noted above, given the sweeping scope of Proposed Regulation SCI and its effect of transforming almost any non-standard occurrence into a reportable SCI event, Omgeo believes SCI entities will likely each have far more than 100 SCI events a year.

⁷² Proposing Release at 18149. The Commission adds that it bases its three burden hour estimate on the burden hour estimate for amendment to Form 19b-4.

As a result of the way in which Proposed Regulation SCI has been drafted, this hour burden would exist even for the most minor incidents due to the sweeping definition of SCI events in the Proposed Regulation SCI. The Proposed Rule will take minor incidents and force SCI entities and their participants or clients to treat them as if they were severe events. This regulatory transformation of mundane events into reportable events will certainly distort behaviors and waste critical and finite SCI entity and Commission resources.

C. Burden Estimate for Proposed Rule 1000(b)(5)

As noted in the Proposing Release, Proposed Rule 1000(b)(5) would impose on SCI entities a new requirement that is not part of the ARP Inspection Program. The Commission observed that although certain SCI entities currently provide their members, participants or clients with notices relating to outages, it expects that number to significantly increase because of the expanded reporting requirements of the Proposed Rule and the broad scope of the SCI events requiring dissemination.

1. Estimated Number of Dissemination SCI Events per Year

The Commission estimated that each SCI entity would experience an average of 14 non-system intrusion dissemination SCI events a year and one systems intrusion dissemination SCI event per year. The Commission estimates that the average burden for each initial dissemination by an SCI entity pursuant to Proposed Rule 1000(b)(5)(i)(A) would be approximately three hours, with an in-house attorney spending approximately 2.67 hours in drafting and reviewing the dissemination, and a webmaster spending approximately 0.33 hours in making the dissemination available to members or participants. Thus, the Commission initially estimated that the annual burden for each SCI entity of complying with the requirements of the Proposed Rule would be 42 hours⁷³ Omgeo believes these numbers greatly underestimate the amount of time and work effort that would be involved each time an SCI entity would be required to disseminate information about an SCI event to its participants, members or clients.

Omgeo believes that one of the reasons that the Proposing Release's estimates for Proposed Regulation SCI are consistently unrealistically low is that the Commission and the Staff are mistakenly relying on their experience under the ARP Inspection Program as a basis for these estimates. For example, the Proposing Release states that the ARP Staff only received reports of 175 incidents in 2011 for the 29 entities that were covered by the ARP Inspection Program for a reported average of six ARP incidents per entity.⁷⁴ The Proposing Release then acknowledges that the broader scope of the definition of SCI event will cause SCI entities to report more incidents and increases its estimate of reportable incidents to 14 per year. As shown below there is a significant compounding effect causing the discrepancy between the Commission's consistently low burden estimates and the reality that would be faced by SCI entities.

Thus, although the Commission correctly concludes that there will be an increase in reportable SCI events, its conclusion does not go far enough. As discussed in detail earlier in this letter, Omgeo believes that almost any non-standard systems event, no matter how minor or immaterial, would fall under the proposed definition of SCI event. As a result, the impact on SCI entities will be far more significant than the Commission has acknowledged in the Proposing Release. Instead of 14 dissemination events a year, Omgeo conservatively believes that the very broad proposed definitions of SCI event and

⁷³ Id.

⁷⁴ See Proposing Release at fn. 409 and 414.

SCI dissemination event would result in a dramatic increase of such events, far beyond the 175 incidents in 2011 under the ARP Inspection Program. Omgeo estimates there would be at a minimum a tenfold increase in reportable events without offering any commensurate value to financial markets and their participants.

2. Estimated Burden to Prepare and Disseminate Initial Notices to Omgeo Clients

The Commission's burden estimates for each dissemination SCI event are far too low. The Proposing Release incorrectly assumes that such an important communication, which would be distributed to multiple affected and non-affected parties, would be drafted only via the efforts of a single attorney and a webmaster. In reality, a number of different people possessing very different skills and levels of authority would have to be involved in any such client communication, especially one that will be so widely disseminated.

An SCI entity carefully drafts any notice to its participants or clients, especially those communications that will be broadly distributed. Due to the importance of providing accurate information to members or participants, and the potential for litigation against an SCI entity in connection with a dissemination SCI event, Omgeo believes SCI entities would spend a great deal of time and effort preparing materials prior to dissemination. Properly drafting such communications will require a concerted effort by a number of individuals, including subject matter experts and mid-level and senior managers.⁷⁵

In addition, the effort and therefore the burden hours of such a task would be increased by the fact that SCI entities like Omgeo would, as a practical matter, have to draft "different" dissemination notices designed to address the particular concerns of the different client segments it serves, e.g, broker-dealers, custodian banks, investment managers, hedge funds, etc. This is true because a responsible SCI entity would want any communication it sends out to its clients or participants to be immediately useful to the recipients. Clients and participants have definite expectations about what information should be in any communications to them about events. Such communications must be written so that clients and participants can easily internalize the information in such communications and quickly understand if their business was or was not impacted by the event being communicated. Clients and participants need such communications to be written in a way that will allow them to make efficient and timely determinations about how to respond to the information communicated in such notices. Any really useful client communication about events must meet these client and participant expectations.

Omgeo estimates that the burden of creating an initial dissemination notice under Proposed Rule 1000(b)(5)(i)(A) for even the most minor incident would be approximately 30 hours. A communication to clients or participants regarding a major or complex incident, such as an outage, would obviously require far more resources. Omgeo estimates that the kind of prudent and cautious review necessary to draft a comprehensive and thorough communication to clients or participants for a material event would likely take up to 100 hours of effort on the part of an SCI entity.⁷⁶

⁷⁵ Subject matter experts required for customer notifications would include a team made up of associates from functions such as Technology, Client Support, Information Security, Legal, Compliance, Product Management, and Sales and Relationship Management. Such important client communications really are a team effort and require many hours of coordinated and concerted effort.

⁷⁶ This estimate of at least 100 hours of effort for a material event is the effort that would be required just to draft and distribute an initial client communication. The estimate does not include any follow-up communications, including answering inquiries from clients asking for more information after they have received the initial communication. Omgeo agrees that with regard to material events that SCI entities

Moreover, Omgeo disagrees with the Commission's assertion that SCI entities are likely to handle internally most of the work associated with disseminating information on dissemination SCI events. To the extent a dissemination SCI event raises the possibility of litigation or reputational damage for an SCI entity, it will likely engage outside counsel to review the facts and prepare materials as required under any regulation that may be adopted. Failure to engage outside counsel in the event of possible litigation or where a firm's reputation might be harmed could be considered a violation of the fiduciary duties an SCI entity has to its shareholders and would also be a failure on the part of any SCI entity to properly manage its own liabilities and risk profile.

Finally, as indicated in the preceding paragraph, Omgeo believes that the Proposed Rule would harm SCI entities because it would effectively impose a great deal of reputational risk on them. SCI entities would suffer reputational injury as a result of the Proposed Rule because they would be forced to send their clients and participants a constant stream of communications detailing minor, inconsequential events which have no impact on them. As a matter of logic, even the most sophisticated client or participant could, after years of receiving such frequent and often inconsequential communications, start to doubt the quality of the service it is receiving from its SCI entity – even if in fact a high level of service was actually being provided – e.g., one that was quite stable, efficient, and secure. Omgeo believes that the reputational risk faced by SCI entities would eventually call into question the implicit goal of Proposed Regulation SCI of increasing the public's faith in the integrity and soundness of the U.S. market infrastructure.

3. Estimated Burden of Responding to Client Questions on Dissemination Notice

In addition, the Commission's burden estimate for Proposed Rule 1000(b)(5)(i)(A) of three hours per dissemination notice does not take into consideration the response of an SCI entity's participants, members or clients. Omgeo strongly believes that any widely disseminated client communication about an incident, even a minor incident, will result in a sizable client response. A dissemination SCI event, especially a security-related dissemination, will likely require interaction by an SCI entity with a number of clients both in person and over the phone. Omgeo conservatively estimates that responding to widely disseminated client communications about significant incidents would require hundreds of hours of SCI entity associate and management time.

Under the regime set out in Proposed Rule 1000(b)(5)(i)(A), an SCI entity would have to devote a great deal of effort answering questions and taking meetings with its participants or clients in the wake of an dissemination SCI event communication. Each client asking for detailed explanations would potentially require hours of effort in order to be absolutely satisfied that the event had been properly handled and was completely resolved. Some participants and clients would be satisfied with telephone discussions. However, other participants and clients may require actual on-site visits. Many of these calls or on-site visits would require the attendance of technical or subject matter experts. Hence, the burden for any widely disseminated SCI event communication would very quickly add up to hundreds of hours.

Burden, however, is not the most significant potential impact of the Proposed Rule. With thousands of clients, providing this level of detailed outreach and discussion for even ten percent of Omgeo's clients would be infeasible within *any risk-relative timeframe*. Outreach and follow-up conversations will take weeks and months. This fact alone would force Omgeo to move to a model of disseminating very general statements and not providing timely contextual discussions for each client. As

should make available to Commission representatives all communications to clients actually impacted by the event in question.

noted previously under the broad proposed definition of SCI event, Omgeo believes that most of the dissemination notifications would likely be non-material.

Omgeo has repeatedly stated above that such constant communications to clients and participants about minor events is a misallocation of critical and finite SCI entity resources. However, equally as significant would be the impact of the Proposed Rule on participants or clients receiving such a constant barrage of communications, most of which would be about minor events that the participants or clients had not noticed because their operations had not been impacted by these events in any way. Omgeo is concerned that participants and clients could become confused by such communications from SCI entities. They may well have difficulty understanding that even though they were not impacted in any way by an occurrence, an occurrence they may well consider to be completely insignificant, they have nevertheless received a detailed communication about it. In addition, Omgeo believes that the finite and limited resources of participants and clients would be wasted in efforts to determine that the event for which they received a communication, an event they never noticed, must be analyzed and digested by management and the appropriate associates.⁷⁷ Perhaps most importantly, as clients realize this fact they would learn to ignore dissemination notifications under Proposed Rule 1000(b)(5) and consider them to be nothing more than immaterial noise. This result would be the exact opposite of the Commission's goals for Proposed Rule 1000(b)(5).

4. Estimated Burden of Providing Follow-up Notices to Omgeo Clients

The Commission estimates that Proposed Rule 1000(b)(5)(i)(B) would impose a burden of only five hours per SCI entity per SCI event. This estimate is remarkably low considering that the requirements of Proposed Rule 1000(b)(5)(i)(B) are quite exact and extensive. It would require each SCI entity to disseminate to its participants or members: (i) a detailed description of the SCI event; (ii) the SCI entity's current assessment of the types and numbers of market participants potentially affected by the SCI event; and (iii) a description of the progress of its corrective action for the SCI event and when the SCI event has been or is expected to be resolved. The Proposing Release states that an in-house attorney could do all this in a mere 4.67 hours of drafting and reviewing and that a webmaster could distribute this information to all participants and clients in .33 hours.⁷⁸

This estimate is inaccurate for all the reasons discussed above. It does not take into account the large number of subject matter experts who would have to cooperate to draft such a comprehensive, detailed communication. It also fails to take into account: (i) the time that management would have to spend reviewing and commenting on such a communication; (ii) the distinct possibility that outside counsel may have to be consulted; and (iii) the likelihood that clients and participants will respond and ask for more detailed information and that follow-up responses will be necessary to completely satisfy all

⁷⁷ This waste of participant or client resources would be the mirror image of the waste of Commission resources under Proposed Rule 1000(b)(4). In both cases, critical and finite resources would be expended due to the overly broad reporting and client notice dissemination requirements of Proposed Regulation SCI. With regard to the participants and clients, who are actual market participants, it is likely the overly broad scope of Proposed Regulation SCI would impose indirect costs on investors. With regard to the Commission, it is likely that the overly broad reporting requirements of Proposed Regulation SCI would cause the Commission to misallocate its finite and critical resources in an attempt to analyze and understand thousands of reports – reports that too often will be about minor, inconsequential events where there was no impact on financial markets.

⁷⁸ *Id.* at 18150.

of the members of an SCI entity's client or member community that an event was properly handled and has been completely resolved.

In short, the Commission's burden estimate has little basis in fact when compared to Omgeo's experience. Omgeo believes that each follow-up notice would once again require an SCI entity to expend substantial resources both: (1) initially as the follow-up notice is drafted, reviewed, approved, and disseminated; and (2) with regard to responding to client inquiries. Omgeo estimates that each follow-up notice would impose a burden far greater than five hours. As with the initial communication made pursuant to Proposed Rule 1000(b)(5)(i)(A) described above, a communication about a minor, insignificant incident would require substantial SCI entity resources. Should an SCI entity experience a material event, then more resources and therefore more hours would be required to satisfy the dissemination requirements of Proposed Rule 1000(b)(5).

5. Estimated Burden of Further Updating Members or Participants

Omgeo also takes issue with the burden estimate for Proposed Rule 1000(b)(5)(i)(C). The Commission estimates that it would only take an SCI entity one hour a year to comply with this Proposed Rule, which would require that the SCI entity provide regular updates to any of the information disseminated under Proposed Rules 1000(b)(5)(i)(A) and 1000(b)(5)(i)(B). Again, the Commission mistakenly assumes that an in-house lawyer and a webmaster are all that would be needed to comply with the proposed requirement (0.67 hours for the in-house attorney to draft and review the communication and .33 hours for the webmaster to distribute it). The Commission estimates that each SCI entity would only have to provide one such update a year.⁷⁹

Omgeo believes that this estimate is far too low and must be revised upwards in the final version of Regulation SCI. Rather than repeat all of the reasons for this conclusion, Omgeo will merely reference the arguments it has previously made with regard to its analysis of the burden that Proposed Rules 1000(b)(5)(i)(A) and 1000(b)(5)(i)(B) would impose. Omgeo believes that a more accurate estimate of the updating burden that would be imposed on an SCI entity by Proposed Rule 1000(b)(5) is far more than an hour a year.

6. Estimated Cost of Proposed Rule 1000(b)(5)(ii)

Proposed Rule 1000(b)(5)(ii) would require an SCI entity to disseminate a summary description of a systems intrusion after any responsible SCI personnel becomes aware of the systems intrusion, including a description of the corrective action taken and when the systems intrusion has been or is expected to be resolved. The Proposed Rule would allow SCI entities to not disseminate this information if the SCI entity determined that such information would likely compromise the security of its SCI systems or SCI security systems, or an investigation of the systems intrusion provided it documents the reasons for such an intrusion. The Commission estimates that this Proposed Rule would only impose a burden of three hours per incident on each SCI entity once a year (2.67 hours for an in-house attorney to draft and review the dissemination and .33 hours for a webmaster to distribute it).⁸⁰

Omgeo once again asserts that this estimate is far too low and must be revised upwards. Rather than repeat the same arguments explaining why compliance with this paragraph of the Proposed Rule would require far more than three hours per incident, Omgeo will simply refer the Commission to its arguments against the Commission's burden estimates for Proposed Rule 1000(b)(5)(i) detailed above. Omgeo instead believes that compliance with Proposed Rule 1000(b)(5)(ii) would require an SCI entity to

⁷⁹ *Id.*

⁸⁰ *Id.*

expend hundreds of burden hours per incident. Omgeo also estimates that there will be more than one such incident a year as a result of the broad definition of the systems intrusion in Proposed Regulation SCI.

The heavy burden of this Proposed Rule could be reduced if in the final Rule the following sensible steps were taken. First, Proposed Rule 1000(b)(5) should contain a true materiality standard that would separate material incidents from non-material incidents. Only the former should be treated as SCI events requiring notice to an SCI entity's clients. Second, the final Rule should only require dissemination to those SCI entity clients or participants that are materially affected by a systems intrusion. In most cases, systems intrusions as defined in the Proposing Release would not impact such clients or participants and would typically be imperceptible and inconsequential to them.

For example, a "systems intrusion" SCI event as proposed would include failed attempts to compromise a system. In this example, Omgeo would detect and prevent an intrusion without any visible or actual impact to clients. Rather than direct dissemination to clients, non-material cyber-relevant events should be instead be provided and disseminated through the Financial Services ISAC which has been set up specifically for this purpose. A narrowing of this definition along the lines suggested earlier in this letter would certainly reduce the burden of Proposed Rule 1000(b)(5)(ii) and also maintain the relevance of such notifications.

D. Burden Estimate for Proposed Rule 1000(b)(6)

Proposed Rule 1000(b)(6) would require an SCI entity, absent exigent circumstances, to notify the Commission on Form SCI at least 30 calendar days before the implementation of any planned material systems change, including a description of the planned material systems change as well as the expected dates of commencement and completion of the implementation of such change. The Commission estimates that each SCI entity would have approximately 60 planned material systems changes per year and that it will take an average of two hours to prepare and submit the notifications that would be required by the Proposed Rule.⁸¹ Thus SCI entities that have not previously participated in the ARP Inspection Program would each, according to the Commission, have a burden of 120 hours per year. However, the Commission believes that the 29 SCI entities currently subject to the ARP Inspection Program would only have an increased burden of 30 hours each per year.⁸²

Omgeo believes that the Commission has again significantly underestimated the burden hours of the Proposed Rule. Omgeo has participated in the ARP Inspection Program since its inception and regularly submits systems change notifications to the Staff. For the initial notification, Omgeo knows, based on its extensive experience, the burden hours of the notice that would be made pursuant to Proposed Rule 1000(b)(6) would be at least 62 hours per notice instead of the two hours estimated by the Commission.

The primary reason for this large discrepancy between the Commission's estimate and Omgeo's experience is that the Commission mistakenly assumes that only two parties would be involved in the drafting of such a notice, a senior systems analyst (who will devote 1.67 hours to such a project) and an in-house attorney (who will) have to devote .33 hours to each notice).⁸³ The drafting and submitting of such notices is more complicated and more labor intensive than the Commission believes. As discussed with regard to the estimates for the other Proposed Rules, a number of subject matter experts would need

⁸¹ Id. at 18151.

⁸² Id. at fn. 434. The Commission attributes this increase of 30 additional hours primarily to the broadened definitions of SCI systems and SCI security systems.

⁸³ Id.

to be involved in drafting and reviewing these notices. A senior systems analyst working with an in-house attorney would not be sufficient to do this task properly and responsibly. Omgeo's experience in preparing systems change notifications is that multiple experts in several subject matter domains with various experience levels are needed because of the amount of work involved in gathering, and analyzing information, writing, reviewing, iterating, editing, preparing, approving and sending systems change notifications to the Commission. Omgeo knows that the subject matter expertise needed to prepare a systems change notification includes staff from: Project Management, Developments, Quality Assurance, Performance Testing, Systems Engineering, Systems Architecture, Capacity Planning, Information Security, Business Continuity, Disaster Recovery, Legal and Compliance.

The Commission must understand as it drafts the final Rule that building and maintaining large scale technology services truly does take a village. Such systems are the product of the efforts of a large and skilled community and this concept must be built into any truly accurate burden estimates for the sweeping operational changes that Proposed Regulation SCI seeks to impose. Thus, Omgeo believes each such notice will require far more than two hours of effort.

Finally, Proposed Rule 1000(b)(6) doesn't specify what level of detail should be reported to the Commission with respect to material systems changes. Exhibit 4 of the Form SCI indicates that the SCI Entity should provide "a description of the planned material system changes as well as the expected dates of commencement and completion of implementation of such changes." However, Exhibit 4's requirements mentions only two of the ten elements detailed in the Commission's 2001 Interpretive Letter sent to SROs and NASDAQ and the SEC ARP II guidance collectively. For the purposes of this analysis, Omgeo is assuming that the omission of the other either existing elements of the Interpretive Letter is unintentional. The adopting release for the final version of Regulation SCI should clarify this issue. Omgeo urges the Commission to specify in the final Rule the required content for a Planned Material System Change Notification.

E. Estimated Burden of Proposed Rule 1000(b)(7)

Proposed Rule 1000(b)(7) would require each SCI entity to conduct an SCI review of its compliance with Proposed Regulation SCI not less than once each calendar year, and submit a report of the SCI review to its senior management for review no more than 30 calendar days after completion of such SCI review. The Commission preliminarily estimates that the initial and ongoing burden of conducting an SCI review and submitting the SCI review to senior management of the SCI entity for review would be approximately 625 hours for each SCI entity.⁸⁴ Omgeo disagrees with this estimate, and believes it should be revised upwards.

First, Omgeo believes that a clarification is in order. Proposed Rule 1000(b)(7) could be interpreted in two different ways. The first interpretation would be that the Proposed Rule is simply a request for SCI entities to conduct an internal ARP Inspection Program review. The second interpretation is that the review sought by the Proposed Rule would be wider ranging, *i.e.*, that the Commission is asking entities to conduct internal inspections that would be broader in scope than current ARP Inspections, *e.g.*, a review of procedures and controls including industry best practices.

Omgeo notes that the definition of "SCI review" set forth in Proposed Rule 1000(a) is quite detailed. Should the first possibility be the Commission's intention, an internal ARP style review, it would mean a review that would follow established procedures and standards, that is performed by objective personnel having appropriate experience in conducting reviews of SCI systems and SCI security systems, and which review contains: (1) a risk assessment with respect to such systems of the SCI entity;

⁸⁴ Proposing Release at 18151.

and (2) an assessment of internal control design and effectiveness to include logical and physical security controls, development processes, and information technology governance, consistent with industry standards. In addition, such review would be required to include penetration test reviews of the SCI entity's network, firewalls, development, testing and production systems at a frequency of not less than once every three years.⁸⁵

Once again, the Commission's estimate does not take into account the additional work that would be required by many different SCI entity associates, including managers and subject matter experts, in order to satisfy the comprehensive requirements of Proposed Rule 1000(b)(7). The Proposing Release incorrectly assumes that only three people would be required to work on the SCI review – an attorney (who would work 80 hours); a manager internal audit (who would work 170 hours) and a systems analyst (who would work 375 hours).⁸⁶ Instead of 625 hours estimated by the Commission, Omgeo believes that should the first interpretation set out above apply that a more accurate estimate of the annual burden of the Proposed Rule would be approximately 4,670 hours.

As noted many times in this burden analysis of the various Proposed Rules that will make up Proposed Regulation SCI, Omgeo believes that multiple experts with various experience levels would be required in several subject matter domains because of the amount of work involved in gathering, analyzing, preparing, reviewing and presenting data and supplying oversight. Omgeo believes that the subject matter expertise that would be needed to perform such a review includes Product Managers, Project Managers, Developers, Quality Assurance staff, Systems Engineers, Systems Architects, Capacity Planners, Information Security experts, Business Continuity and Disaster Recovery staff, Compliance staff and management. Subject matter experts would be required to contribute consultative advice cross-functionally to multiple subject matter domains.

However, if the second interpretation of the Proposed Rule is what the Commission intends, *i.e.*, that the Commission is asking SCI entities to conduct a broader scope review beyond those now required by the ARP Inspection Program, then the total number of annual burden hours would be considerably higher than 4,670 hours set forth above. In that case, Omgeo estimates that the total burden hours of such a broad review under the Proposed Rule would increase by 6,529 of hours for a total of 11,199 burden hours.

F. Estimated Burden of Proposed Rule 1000(b)(8)

Pursuant to Proposed Rule 1000(b)(8)(i), each SCI entity would be required to submit to the Commission, as an attachment to Form SCI, a report of the SCI review required by Proposed Rule 1000(b)(7), together with any response by senior management of the SCI entity, within 60 calendar days after its submission to senior management of the SCI entity. The Commission estimates that each SCI entity would require one hour of effort to submit the SCI review using Form SCI.⁸⁷ The Commission estimates it would require the work of one attorney to do this.⁸⁸

This estimate, however, does not attempt to address the burden on senior management of reading, analyzing, and perhaps responding to the extensive review required by Proposed Rule 1000(b)(7). This omission is odd in light of the fact that the Commission implies very strongly that the purpose of

⁸⁵ Proposing Release at 18123.

⁸⁶ *Id.* at fn. 438.

⁸⁷ Proposing Release at 18151.

⁸⁸ *Id.* at fn. 439.

Proposed Rule 1000(b)(8)(i) is to hold management responsible for any future technology issues.⁸⁹ This omission is also significant because, as noted above, management time is limited in quantity and therefore especially valuable.

Also, as discussed above, Omgeo believes the Commission should omit from the final version of Regulation SCI, Proposed Rule 1000(b)(8)(ii), as it is unnecessary and would create an additional burden on SCI entities without a corresponding public benefit to justify its costs. Proposed Rule 1000(b)(8)(ii) would require each SCI entity to submit a report, using Form SCI, within 30 days after the end of June and December each year, describing any material systems changes during the six-month period ending on June 30 or December 31, as the case may be, and the date, or expected date, of completion of their implementation. In the Proposing Release, the Commission estimates that the time necessary to create the two reports required under the Proposed Rule would be approximately 60 hours per SCI entity per report or 120 hours annually.⁹⁰

Again, Omgeo has participated in the Commission's voluntary ARP Inspection Program since its inception and regularly submits systems change notifications to the Commission. Omgeo does not perceive there to be additional utility from the submission of bi-annual reports listing notifications sent in the last six months. Omgeo believes submission of bi-annual reports would be duplicative and be without tangible benefit. Omgeo does not believe this additional step would enhance Omgeo's control environment, the Commission's oversight of Omgeo, or the Commission's record keeping effort.

G. Estimated Burden of Proposed Rule 1000(b)(9)

Omgeo believes that the burden estimates for Proposed Rule 1000(b)(9) are far too low. The Commission asserts that an exempt clearing agency subject to ARP Inspection Program will be able to require its clients to comply with the requirements of Proposed Rule 1000(b)(9) by "revising Participant agreements and internal procedures."⁹¹ It then estimates that the burden of the Proposed Rule per SCI entity will initially be approximately 130 hours, approximately 35 hours to write a proposed rule or to revise its participant agreement and approximately 95 hours for follow-up work (e.g., notice and schedule coordination).⁹²

This analysis is flawed and dramatically underestimates the time and resources that would be required of the SCI entity to comply with Proposed Rule 1000(b)(9). First, and perhaps most importantly, the Commission fails to adequately consider that exempt clearing agencies such as Omgeo (as well as ATS's that are SCI entities) have a fundamentally commercial relationship with their clients and are not SROs that have the power to adopt rules to alter member behavior. In short, exempt clearing agencies lack the authority to regulate the behavior of their clients.

Additionally, the Commission wrongly asserts that exempt clearing agencies have "Participant Agreements" similar to SROs. Omgeo does not have a Participant Agreement; rather its client relationships are wholly contractual and often based on negotiated agreements. Omgeo's clients do not automatically agree to all terms stated in its standard contract that is presented to them at the beginning of their relationship with Omgeo. Although Omgeo endeavors to keep its contracts standardized, it must

⁸⁹ See Proposing Release at 18124. "[This review] is designed to ensure that the senior management of the SCI entity is aware of any issues with its systems and promptly establishes plans for resolving such issues."

⁹⁰ Proposing Release at 18151.

⁹¹ Proposing Release at 18147.

⁹² Id.

negotiate with many of its clients and is not in a similar position to an SRO, which has the ability to dictate or impose terms to its participants and members through rulemaking.

As a practical matter, this means that Omgeo has limited ability, especially with its larger, critical clients, to require them to accept terms in its standard contracts they do not agree with. Our experience is that clients tend to resist any terms in a contract that places burdens on them. Thus, if a client insists that it will not test with Omgeo in the manner set out in Proposed Rule 1000(b)(9), Omgeo would have great difficulty including this requirement as a term in the final agreement. Furthermore, simply revising Omgeo's internal procedures does not address the contractual nature of Omgeo's relationship with its clients.

Finally, Omgeo has contractual relationships with thousands of clients around the world. A difficult negotiation requires a substantial number of hours of effort from Omgeo's legal personnel. While a certain significant percentage of Omgeo's clients may sign our contracts without any negotiation, many do not.⁹³ Contract negotiations always require a great deal of time and commitment from Omgeo's legal personnel.

As a result, we believe that if the final Rule is substantially similar to what has been proposed, the burden hours on Omgeo for just Proposed Rule 1000(b)(9) will be many thousands of hours, not the 130 hours contained in the Proposing Release's burden estimate. The burden of Proposed Rule 1000(b)(9) would not only impose a new and difficult term into any future negotiations with clients that have not yet signed one of Omgeo's contracts, but would require Omgeo to go back to the many thousands of clients it has already signed up and begin yet another difficult round of negotiating with each of them.⁹⁴ Omgeo therefore believes that if the Proposed Rule is adopted as proposed Omgeo will be forced to spend many thousands of hours on such a project with no guarantee that all of our clients would actually agree to such an amendment of their existing contracts.

Without an explicit mandate from the Commission for market participants to agree to test with an SCI entity, it is possible, perhaps even likely, that Omgeo clients would refuse to agree to modification of their current contracts. Instead, market participants may decide to move away from getting their services through SCI entities and in the process introduce increased risk to the U.S. financial markets. Omgeo believes that the better and more efficient solution would be for the Commission to exercise its authority to adopt regulations that will require participants in the U.S. financial markets to test with their SCI entities on a systemic basis.

XI. Conclusion

Omgeo appreciates the opportunity to comment on the Commission's Proposal and provide the information set forth above. Should you wish to discuss these comments further, please contact me at 212-855-3244 or nreed@dtcc.com.

Sincerely,



Norman Reed
General Counsel
Omgeo LLC

⁹³ Even if a client signs a contract without any negotiation, Omgeo must still spend approximately a half hour processing this document.

⁹⁴ Omgeo notes, however, that all of its largest clients have signed its contract.