## Rule 17Ad-22(e)(7): Liquidity Risk a. Proposed Rule

As proposed, Rule 17Ad-22(e)(7) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively measure, monitor, and manage the liquidity risk that arises in or is borne by it, by meeting, at a minimum, the ten requirements specified in the rule.

Proposed Rule 17Ad-22(e)(7)(i) would require that a covered clearing agency's policies and procedures be reasonably designed to ensure that it maintains sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that includes the default of the participant family that would generate the largest aggregate payment obligation for it in extreme but plausible market conditions.

Proposed Rule 17Ad-22(e)(7)(ii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that it holds qualifying liquid resources sufficient to meet the minimum liquidity resource requirement in each relevant currency for which the covered clearing agency has payment obligations owed to clearing members. The Commission also proposed Rule 17Ad-22(a)(15) to define "qualifying liquid resources," which would include three types of assets, in each relevant currency:

- cash held either at the central bank of issue or at creditworthy commercial banks;
- assets that are readily available and convertible into cash through either:
- prearranged funding arrangements without material adverse change limitations, such as committed lines of credit, foreign exchange swaps, and repurchase agreements, or other prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the board of directors of the covered clearing agency following a review conducted for this purpose not less than annually; and
- other assets that are readily available and eligible for pledging to (or conducting other appropriate forms of transactions with) a relevant central bank, if the covered clearing agency has access to routine credit at such central bank.

Proposed Rule 17Ad-22(e)(7)(iii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it uses accounts and services at a Federal Reserve Bank, pursuant to Section 806(a) of the Clearing Supervision Act, or other relevant central bank, when available

and where determined to be practical by the board of directors of the covered clearing agency, to enhance its management of liquidity risk.

Proposed Rule 17Ad-22(e)(7)(iv) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it undertakes due diligence to confirm that it has a reasonable basis to believe each of its liquidity providers, whether or not such liquidity provider is a clearing member, has sufficient information to understand and manage the liquidity provider's liquidity risks, and the capacity to perform as required under its commitments to provide liquidity.

Proposed Rule 17Ad-22(e)(7)(v) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that the covered clearing agency maintains and, on at least an annual basis, tests with each liquidity provider, to the extent practicable, its procedures and operational capacity for accessing each type of relevant liquidity resource.

Proposed Rule 17Ad-22(e)(7)(vi)(A) through (C) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to determine the amount and regularly test the sufficiency of the liquid resources held for purposes of meeting the minimum liquid resource requirement of proposed Rule 17Ad-22(e)(7)(i) by (A) conducting a stress test of its liquidity resources at least once each day using standard and predetermined parameters and assumptions; (B) conducting a comprehensive analysis of the existing stress testing scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources, and considering modifications to ensure they are appropriate for determining the covered clearing agency's identified liquidity needs and resources in light of current and evolving market conditions at least once each month; and (C) conducting a comprehensive analysis of the existing stress testing scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources more frequently when products cleared or markets served display high volatility or become less liquid, when the size or concentration of positions held by participants increases significantly, or in other circumstances described in the covered clearing agency's policies and procedures. Proposed Rule 17Ad-22(e)(7)(vi)(D) would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to result in reporting the results of the analyses performed under proposed Rule 17Ad-22(e)(7)(vi)(B) and (C) to appropriate decision makers, including the risk management committee or board of directors, at the covered clearing agency for use in evaluating the adequacy of and adjusting its liquidity risk management framework.

Proposed Rule 17Ad-22(e)(7)(vii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to result in performing an annual or more frequent conforming model validation of its liquidity risk models.

Proposed Rule 17Ad-22(e)(7)(viii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to address foreseeable liquidity shortfalls that would not be covered by its liquid resources and seek to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations.

Proposed Rule 17Ad-22(e)(7)(ix) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to describe its process for replenishing any liquid resources that it may employ during a stress event.

Finally, proposed Rule 17Ad-22(e)(7)(x) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that it, at least once a year, evaluates the feasibility of maintaining sufficient liquid resources at a minimum in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the two participant families that would potentially cause the largest aggregate payment obligation for the covered clearing agency in extreme but plausible market conditions if the covered clearing agency provides CCP services and is either systemically important in multiple jurisdictions or a clearing agency involved in activities with a more complex risk profile.

### b. Comments Received and Commission Response i. General Approach

Six commenters expressed general support for the proposed rule. Of these, one commenter stated that proposed Rule 17Ad-22(e)(7) was prudent and appropriate in light of the need for covered clearing agencies to maintain adequate liquidity to minimize systemic risks and that, by requiring ongoing testing and monitoring of underlying assumptions, covered clearing agencies should be able to identify potential problems with sufficient time to respond without significant disruptions. Four commenters expressed support for the Commission's proposed approach to qualifying liquid resources other than committed funding arrangements, which is discussed further below in Part.C.7.b.

#### **Due Diligence for Liquidity Providers**

Two commenters stated that the requirement in proposed Rule 17Ad-22(e)(7)(iv) regarding policies and procedures to perform due diligence of liquidity providers must take into account the context of the due diligence being performed. One of these commenters stated that commercial lenders are not likely to provide their borrowers with non-public information on their internal policies and controls, and that accordingly covered clearing agencies should not be expected to evaluate a commercial lender's internal risk controls. First, in the experience of Commission staff, liquidity facilities may not consist only of traditional commercial loans. For example, a covered clearing agency may seek out committed repurchase agreement facilities with counterparties other than traditional commercial lenders. In such a circumstance, the commenter's experience with such counterparties may be different than with a traditional commercial lender. Accordingly, in contrast to the commenter's assertion, a covered clearing agency may engage in a relationship with a liquidity provider that is not a typical commercial lender and therefore may be more willing to facilitate due diligence. Second, while the Commission acknowledges that a lender may choose not to provide their borrowers with non-public information on certain internal policies and controls, the proposed rule does not require a covered clearing agency's policies and procedures regarding due diligence for liquidity providers to specifically review all internal policies and controls. Rather, it requires due diligence policies and procedures that confirm the covered clearing agency has a reasonable basis to believe that a liquidity provider understands and manages the liquidity provider's liquidity risks and the capacity to perform as required under its commitments to provide liquidity to the covered clearing agency. If, in performing due diligence consistent with its policies and procedures formulated in accordance with the rule, a covered clearing agency cannot confirm that it has a reasonable basis to believe both of the required criteria, then the covered clearing agency would not have a liquidity provider consistent with Rule 17Ad-22(e)(7)(iv).

The second commenter stated that it is not appropriate to require a covered clearing agency to perform due diligence on a central bank acting as its liquidity provider and requests that the rules clarify that the requirements under Rule 17Ad-22(e)(7)(iv) do not apply where a central bank is a liquidity provider for a covered clearing agency. The Commission does not believe that the rule needs to be modified to account for this circumstance, however, as the policies and procedures of the covered clearing agency could account for the different circumstances that A third commenter expressed the view that the Commission should clarify the due diligence requirements of proposed Rule 17Ad-22(e)(7)(iv) to expressly require a covered clearing agency to take into account the potential wrong-way risk associated with reliance on participants or their affiliates as liquidity providers. The commenter further stated that the Commission should take additional steps to mitigate wrong-way risk by requiring a covered clearing agency to ensure the appropriate diversification of its liquidity providers and limit its reliance on its participants or their affiliates as potential sources of liquidity. The

Commission believes that diversifying liquidity providers may be helpful because such diversification would result in less concentrated, and potentially more manageable, financial commitments among a covered clearing agency's liquidity providers. For example, a covered clearing agency generally should conduct an assessment of the liquidity provider's business in light of both the covered clearing agency's own business and the composition of its existing liquidity providers. In turn, a covered clearing agency could assess the likelihood that a liquidity provider might be unable to meet its own liquidity demands at the same time as the covered clearing agency was facing a liquidity shortfall and attempting to draw on liquidity from its liquidity provider, allowing the covered clearing agency to account for the potential wrong-way risk associated with reliance on participants or their affiliates as liquidity providers. Although there may be circumstances where it would be appropriate for a covered clearing agency to incorporate the policies and procedures such as those suggested by the commenter, the Commission's approach to Rule 17Ad-22(e) focuses on principles. The circumstances may vary, and a covered clearing agency should appropriately manage its risks as they arise, considering the full set of tools available and its risk management framework. Accordingly, after careful consideration, the Commission declines to accept the commenter's suggestion with respect to wrong-way risk because it would be inconsistent with the overall approach to Rule 17Ad-22(e).

In addition, the commenter stated that the reliance on committed funding arrangements in proposed Rule 17Ad-22(a)(15) may lead to this overreliance on participants or their affiliates for liquidity. The Commission addresses this aspect of the comment below in Part.C.7.b.

# **Qualifying Liquid Resources**

Commenters generally supported the Commission's proposed approach to determining qualifying liquid resources. One commenter supported the Commission's overall approach and, in particular, the inclusion of assets that are readily available and convertible into cash through repurchase agreements. Another commenter supported the Commission's approach to the definition of "qualifying liquid resources," and expressed the view that expansion of qualifying liquid resources beyond committed funding arrangements is necessary to ensure the proper functioning of covered clearing agencies. The commenter noted that a committed liquidity facility would generally be preferable over a non-committed facility, but the commenter also acknowledged that other aspects of a facility (e.g., size or cost of the facility) may tip the balance toward selection of the non-committed facility. In particular, the commenter emphasized the unique liquidity needs of clearing entities, the limited number and capacity of liquidity providers in the market that are willing and able to participate in committed liquidity facilities for clearing entities, and the commercial and regulatory realities that could

constrain the availability of committed facilities for covered clearing agencies. The Commission is mindful of these concerns, but notes that policies and procedures providing for the use of uncommitted facilities must also satisfy the terms of Rule 17Ad-22(e)(15) to address general business and operational risk that could arise from such uncommitted facilities.

One commenter stated that requiring covered clearing agencies to rely on committed funding arrangements in all cases could increase a covered clearing agency's reliance on its participants or their affiliated banks and potentially exacerbate a liquidity crisis by transferring the risk of a covered clearing agency to its liquidity providers and vice versa. However, the comment assumes that the rule prohibits reliance on other types of facilities or prearranged funding arrangements, which is not the case. To some degree, the purpose of a liquidity facility is to transfer risk from the covered clearing agency to its liquidity providers. Further, the resources described in the definition of "qualifying liquid resources" should be viewed as part of a hierarchy, where cash should be the primary source of liquid resources, followed first by prearranged funding arrangements and last by other assets readily available and eligible for pledging to a relevant central bank in a jurisdiction that permits such pledges. In addition, within the class of prearranged funding arrangements, available committed arrangements without material adverse change ("MAC") provisions generally should be obtained before seeking to obtain other prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the covered clearing agency's board of directors. The Commission believes that a covered clearing agency generally should consider having policies and procedures that establish a preference for cash and prearranged funding arrangements, but the Commission acknowledges that a covered clearing agency's policies and procedures may need to account for the extent to which such resources are available to them given the size of their liquidity demands.

With respect to whether and how repurchase agreements might fit within the definition of qualifying liquid resources, one commenter stated that prearranged and highly reliable funding arrangements may be demonstrated through non-committed repurchase agreement facilities with major bank-dealers. According to the commenter, a covered clearing agency relying on such a facility would need to ensure that it is structured appropriately to be highly reliable, taking into account the fact that a facility may be used in a clearing member default scenario in extreme market circumstances. The commenter also stated that a covered clearing agency's procedures for making draws on uncommitted repurchase facilities should specifically contemplate the timing of close-out arrangements for defaulted clearing members and should provide for draws on such facilities to be made by specified times during business day mornings to ensure that dealer banks have sufficient time to facilitate liquidation of the U.S. Treasury securities. The commenter believed this approach would be fully consistent with the

PFMI. The Commission notes that this type of approach, reflected in the policies and procedures of a covered clearing agency as part of a broader attempt to define qualifying liquid resources comprehensively, could be consistent with the Commission's definition of prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the board of directors of the covered clearing agency, assuming it was subject to a not less than annual review. The Commission believes that the board of directors of a covered clearing agency generally should rely on rigorous analysis of the properties of a prearranged funding arrangement, in making a determination that it was highly reliable in extreme but plausible market conditions.

With respect to the rule's reference to "material adverse change provisions," two commenters recommended that the reference be removed. One commenter noted that the proposed rule text appears to be in tension with the preamble of the CCA Standards proposing release because it includes, among qualifying liquid resources, prearranged funding arrangements other than committed arrangements, but only where such arrangements have no MAC provisions. The commenter stated that, by definition, a non-committed facility is uncommitted and therefore MAC provisions are inapplicable. The commenter further noted that this is a liquidity standard not set forth in the PFMI, which will lead to confusion and inconsistency in attempting to apply the standard. The commenter recommended that the reference to MAC clauses in the proposed definition of "qualifying liquid resources" be removed. The second commenter similarly recommended that the Commission remove the reference to MAC clauses in the definition of qualifying liquid resources for prearranged funding arrangements other than committed arrangements, noting that Master Repurchase Agreements do not have MAC clauses because they are uncommitted facilities.

In response to the comments, the Commission is modifying the proposed definition of "qualifying liquid resources" so that only paragraph (A) includes a prohibition on MAC clauses. For uncommitted facilities, because they are by their terms uncommitted, the party providing an uncommitted facility generally would have no need to include a MAC clause. In contrast, a party providing a committed facility could choose to contract into an arrangement with or without a MAC clause, at the party's discretion. As noted above, the Commission believes that a covered clearing agency generally should consider having policies and procedures that establish a preference for cash and prearranged funding arrangements. Within the category of prearranged funding arrangements, the Commission also believes that a covered clearing agency generally should preference committed arrangements over other types of prearranged funding arrangements, and that within the category of committed arrangements, a covered clearing agency generally should preference those without MAC clauses over those with MAC clauses. The Commission notes that a covered clearing agency would, when relying on a

committed funding arrangement with a MAC clause pursuant to the definition of "qualifying liquid resources," also need to have policies and procedures demonstrating that such committed facility was a prearranged funding arrangement determined to be highly reliable even in extreme but plausible market conditions by the board of directors following a review conducted for this purpose no less than annually. The Commission also believes that, as a general matter, policies and procedures regarding qualifying liquid resources, including those related to prearranged funding arrangements, would constitute a proposed rule change under Section 19(b) of the Exchange Act and, for designated clearing agencies, an advance notice under the Clearing Supervision Act.

#### **Final Rule**

The Commission is adopting two modifications to the definition of "qualifying liquid resources" and, because of other modifications to Rule 17Ad-22(a), moving the definition to Rule 17Ad-22(a)(14). The Commission is modifying paragraph (ii) so that the reference to MAC clauses is tied to committed arrangements rather than prearranged funding arrangements more generally, as previously described in Part.C.7.b. In addition, because not all central banks permit pledging certain assets that are readily available and eligible for pledging, the Commission is modifying paragraph (iii) to clarify that practices with respect to routine credit at a central bank may vary across jurisdictions.

The Commission is also adopting Rule 17Ad-22(e)(7) with modifications. First, the Commission is modifying Rule 17Ad-22(e)(4)(vi)(A) to refer to "stress testing" rather than "a stress test" to improve consistency with the definition of "stress testing" in Rule 17Ad-22(a)(17). Second, the Commission is modifying Rule 17Ad-22(e)(7)(vi)(C) in two ways. To improve consistency with Rule 17Ad-22(e)(4)(vi)(C), the Commission is adding "or" to link "display high volatility" with "become less liquid" because these concepts are intended to describe events related to the products cleared or markets served. This change corrects a typographical error in the CCA Standards proposing release. The Commission is also replacing "and" with "or" in Rule 17Ad-22(e)(7)(vi)(C) so that the criteria for conducting analysis more frequently than monthly are disjunctive rather than conjunctive, since the list of criteria is open to other appropriate circumstances described in a covered clearing agency's policies and procedures and may not be correlated. Third, the Commission is making two modifications in adopting Rule 17Ad-22(e)(7)(vi)(D) to correct technical errors in the proposed rule text: (i) references to paragraphs (e)(6)(vii)(B) and (C) will be changed to paragraphs (e)(7)(vi)(B) and (C) respectively; and (ii) the rule will refer to the covered clearing agency's "liquidity" risk management framework, rather than its "credit" risk management framework. These modifications are consistent with the Commission's discussion of the proposed rule in the CCA Standards proposing release. Fourth, the Commission is striking "conforming"

from Rule 17Ad-22(e)(7)(vii) to be consistent with the modifications to the definition of "model validation" discussed in Part.C.4.c.

Further, because the Commission recognizes that there may be a number of ways to address compliance with Rule 17Ad-22(e)(7), the Commission is providing the following guidance that a covered clearing agency generally should consider in establishing and maintaining policies and procedures that address liquidity risk:

- whether it has a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities;
- whether it has effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity;
- whether it maintains sufficient liquid resources in all relevant currencies to settle
  securities-related payments, make required variation margin payments, and meet
  other payment obligations on time with a high degree of confidence under a wide
  range of potential stress scenarios, including but not limited to the default of the
  participant and its affiliates that would generate the largest aggregate payment
  obligation to the covered clearing agency in extreme but plausible market
  conditions;
- for the purpose of meeting its minimum liquid resource requirement, whether its
  qualifying liquid resources in each currency include cash at the central bank of
  issue and at creditworthy commercial banks, committed lines of credit, committed
  foreign exchange swaps, and committed repos, as well as highly marketable
  collateral held in custody and investments that are readily available and
  convertible into cash with prearranged and highly reliable funding arrangements,
  even in extreme but plausible market conditions;
- whether it supplements its qualifying liquid resources with other forms of liquid resources and, if so, whether these liquid resources are in the form of assets likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions;
- if it does not have access to routine central bank credit, whether it takes account
  of what collateral is typically accepted by the relevant central bank, as such
  assets may be more likely to be liquid in stressed circumstances, and does not
  assume the availability of emergency central bank credit as a part of its liquidity
  plan;
- whether it obtains a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to

- understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment;
- where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, whether a liquidity provider's potential access to credit from the central bank of issue may be taken into account;
- whether it regularly tests its procedures for accessing its liquid resources at a liquidity provider;
- if it has access to central bank accounts, payment services, or securities services, whether it uses these services, where practical, to enhance its management of liquidity risk;
- whether it determines the amount and regularly tests the sufficiency of its liquid resources through rigorous stress testing; whether it has clear procedures to report the results of its stress tests to appropriate decision makers at the covered clearing agency and to use these results to evaluate the adequacy of and adjust its liquidity risk- management framework;
- in conducting stress testing, whether it considers a wide range of relevant scenarios, including relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions;
- whether such scenarios take into account the design and operation of the
  covered clearing agency, include all entities that might pose material liquidity
  risks to the covered clearing agency (such as settlement banks, nostro agents,
  custodian banks, liquidity providers, and linked clearing agencies), and where
  appropriate, cover a multiday period, and, whether, in all cases, it documents its
  supporting rationale for, and has appropriate governance arrangements relating
  to, the amount and form of total liquid resources it maintains;
- whether it has explicit rules and procedures that enable the covered clearing agency to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants;
- whether these rules and procedures address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same- day settlement of payment obligations; and
- whether these rules and procedures indicate the covered clearing agency's
  process to replenish any liquidity resources it may employ during a stress event,
  so that it can continue to operate in a safe and sound manner.
   In addition, with respect to creditworthy commercial banks under Rule
  17Ad-22(a)(14), a covered clearing agency generally should assess the

creditworthiness of its commercial banks, such as by considering their particular circumstances in which they operate and the markets which they service.

With respect to assets convertible into cash under Rule 17Ad-22(a)(14), the Commission notes that the mere ownership of assets that a covered clearing agency may consider readily available and convertible into cash—based on factors such as the historical volume of trading in a particular market for such asset—depending on the circumstances may not count towards its "qualifying liquid resources" unless one of the prearranged funding arrangements in place would allow the covered clearing agency to receive cash in a timely manner. With respect to the requirements for qualifying liquid resources more generally, the Commission notes that a covered clearing agency generally should consider the lower of the value of the assets capable of being pledged and the amount of the commitment (or the equivalent availability under a highly reliable prearranged facility) as the amount that counts towards qualifying liquid resources in the event there is any expected difference between the two.

With respect to Rule 17Ad-22(e)(7)(ii), the Commission notes that, for example, if payment obligations were denominated in U.S. dollars, the minimum liquidity resource requirement would refer to a U.S. dollar amount.

With respect to Rule 17Ad-22(e)(7)(iii) and access to routine credit at a central bank, the Commission notes that a covered clearing agency is not required to use central bank account services but, rather, is required to establish, implement, maintain and enforce written policies and procedures reasonably designed facilitate such use when available and practical. As noted above, whether the services are available or considered to be practical may vary across jurisdictions. Access to routine credit at a relevant central bank, and the collateral required by such central bank to be posted to secure a loan, may be determined at the discretion of the central bank.

With respect to Rule 17Ad-22(e)(7)(iv) and the policies and procedures for due diligence required thereunder, "due diligence" has the same meaning as is commonly understood by market participants. A covered clearing agency generally should not rely solely on representations made by a liquidity provider but instead should conduct an assessment of the liquidity provider's business, in light of the covered clearing agency's own business and the composition of its existing liquidity providers. Policies and procedures to develop a reasonable basis under Rule 17Ad-22(e)(7)(iv) could include interviewing the liquidity provider's staff and reviewing both public and non-public documents that would allow the covered clearing agency to gather information about relevant factors, including but not limited to the strength of the liquidity provider's financial condition, its risk management capabilities, and its internal controls.

With respect to Rule 17Ad-22(e)(7)(v), a covered clearing agency generally should test its access to liquidity resources by verifying that a liquidity provider is able to provide the relevant liquidity resources in the manner intended under the terms of a funding arrangement and without undue delay by, for example, promptly funding a draw on the covered clearing agency's credit facility. The Commission recognizes that testing procedures also could include test draws funded by the liquidity provider or tests of electronic connectivity between the covered clearing agency and the liquidity provider. Testing with liquidity providers may not always be practicable in the absence of committed liquidity arrangements. In addition, a covered clearing agency generally should conduct the testing not less than once every twelve months.

With respect to Rule 17Ad-22(e)(7)(vii) and policies and procedures for performing the model validation not less than annually, a covered clearing agency generally should perform the model validation not less than once every twelve months.

With respect to Rule 17Ad-22(e)(7)(viii) and foreseeable liquidity shortfalls, foreseeable liquidity shortfalls could include potential shortfalls that can be identified through testing a covered clearing agency's financial resources. The Commission recognizes that foreseeable liquidity shortfalls could occur even when a covered clearing agency is in compliance with the proposed requirements of Rule 17Ad-22(e)(7), such as when the covered clearing agency is unable to obtain liquidity pursuant to prearranged funding arrangements that are uncommitted.

With respect to Rule 17Ad-22(e)(7)(x), a covered clearing agency is not required to adopt a "cover two" standard for liquidity risk but is responsible for undertaking such an analysis at least once a year, pursuant to the covered clearing agency's policies and procedures under Rule 17Ad-22(e)(7)(x). In making any determination regarding the sizing of a covered clearing agency's liquid resources to exceed "cover one," a covered clearing agency could consider, among other things, (i) the business model of the covered clearing agency, such as a utility model (which may be also referred to as an "at cost" model) versus a for-profit model; (ii) diversification of its members' business models as they impact the members' ability to supply liquidity to the covered clearing agency; (iii) concentration of membership of the covered clearing agency, as the breadth of the membership may affect the ability to draw liquidity from members; (iv) levels of usage of the covered clearing agency's services by members, as the concentration of demand on the covered clearing agency's services may bear upon potential liquidity needs; (v) the relative concentration of members' market share in the cleared products; (vi) the degree of alignment of interest between member ownership of the covered clearing agency and the provision of funding to the covered clearing agency; and (vii) the nature of, and risks associated with, the products cleared by the covered clearing agency.