

MIAX Futures Exchange, LLC

Principles for Financial Market Infrastructures Disclosure

Responding Institution:	MIAX Futures Exchange, LLC
Jurisdiction:	Commodity Futures Trading Commission

The information provided in this disclosure is accurate as of October 28, 2025. This disclosure can be found at www.miaxglobal.com.

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INTRODUCTION

I. EXECUTIVE SUMMARY

The following disclosure constitutes the response of MIAX Futures Exchange, LLC (“MIAX Futures” or the “Exchange”), a Delaware limited liability company, to the Disclosure Framework for Financial Market Infrastructures (“Disclosure Framework”) developed by the Committee on Payments and Market Infrastructures¹ of the Bank for International Settlements and the International Organization of Securities Commissions. This disclosure is current as of the date set forth above and will be updated following any material changes to MIAX Futures’ systems or environment. All information presented in this disclosure is for informational purposes only and does not constitute a legal declaration. The information presented herein is accurate to the best of our knowledge and belief, but MIAX Futures cannot guarantee its completeness and is not liable for any errors or omissions.

The Disclosure Framework applies to financial market infrastructures (“FMIs”), which are defined to include payment systems, central securities depositories, securities settlement systems, trade repositories, and central counterparties. A central counterparty (“CCP”) interposes itself between counterparties to contracts traded in one or more financial markets, becoming the counterparty to each party in a trade and thereby ensuring the future performance of open contracts. As a designated contract market and subpart C derivatives clearing organization, MIAX Futures is an exchange and clearing house, registered with and subject to the jurisdiction of the Commodity Futures Trading Commission (“CFTC”). In its operations as a derivatives clearing organization, MIAX Futures’ Clearing House arranges for the clearing and settlement of futures and options transactions initiated, accepted, and executed on a designated contract market. As a result, MIAX Futures functions as a CCP.

The Disclosure Framework contains twenty-four internationally recognized Principles for FMIs (“PFMIs”) designed to ensure a more robust infrastructure for global financial markets, twenty-two of which apply to CCPs. As demonstrated in Section IV of this disclosure, the Exchange observes the twenty-two PFMIs applicable to CCPs.

¹ Previously known as the Committee on Payment and Settlement Systems.

II. GENERAL DESCRIPTION OF MIAX FUTURES

History and Organization:

Founded as the Minneapolis Chamber of Commerce in 1881, MIAX Futures originally opened as a regional cash marketplace to promote fair trade and to prevent trade abuses in wheat, oats, and corn. As a cash marketplace, it became a centralized grain market for farmers, processors, elevator operators, and others needing to buy and sell grain. By providing a location in which grain buyers and sellers could conduct their business, farmers had easy access to buyers and current market prices, elevator operators could locate farmers and merchants, and investors had a market in which to speculate. In 1947, the Minneapolis Chamber of Commerce became the Minneapolis Grain Exchange, and in 2010, the Exchange changed its corporate structure from a Minnesota not for profit organization to a Delaware for profit, non-stock corporation known as the Minneapolis Grain Exchange, Inc. The Exchange remained a membership-owned organization until acquired by Miami International Holdings, Inc. ("MIH") in 2020, at which time it became a wholly owned subsidiary of MIH. In 2024, the Exchange changed its name to MIAX Futures Exchange, LLC.

Today, MIAX Futures continues its history as a commodity exchange. By providing a regulated marketplace and clearing house, MIAX Futures offers market participants transparent price discovery and the ability to manage and limit risk associated with adverse price changes while allowing speculators and traders the opportunity to accept that risk in an attempt to profit from favorable price movements.

Market and Products:

MIAX Futures provides and oversees a fair and reliable marketplace offering personalized service and efficient transactions. MIAX Futures does not participate in trading, nor does it establish prices, but the Exchange does oversee the dissemination of pricing information. Buyers and sellers of futures and options contracts utilize MIAX Futures' marketplace to conduct their risk management activities. The Exchange also hosts a cash market, providing a valuable service for market participants. All MIAX Futures products are traded electronically.

As of the date of this disclosure, products available through MIAX Futures include Minneapolis Hard Red Spring Wheat futures and options. Hard Red Spring Wheat, one of the highest protein wheats grown, represents the Exchange's flagship contract and has traded continuously since its inception.

Services Offered:

As stated above, MIAX Futures is a designated contract market and offers a regulated and transparent commodity exchange for the trading of futures and options. In addition to being a marketplace for executing contracts, MIAX Futures provides essential clearing services via its Clearing House, which is a subpart C derivatives clearing organization. The Exchange's Clearing House guarantees the performance of executed futures and options contracts by assuming the position of counterparty to each buyer and seller. MIAX Futures also establishes and monitors minimum financial and operational standards for its Clearing Members.

Typical Lifecycle of a Futures Transaction:

The following provides a high-level summary of the basic lifecycle of a futures transaction traded electronically on MIAX Futures under normal circumstances:

- 1) To access the electronic trading system (Onyx), a customer or its futures commission merchant (“FCM”)² must first have a trading account with a MIAX Futures Clearing Member. A Market Participant must also have entered into a sponsored access arrangement with a MIAX Futures Clearing Member if so required by the Exchange;
- 2) If a Market Participant has a direct connection to MIAX Futures, the Market Participant must first apply and be approved by the Exchange as an Onyx Direct Participant. Market Participants who do not have a direct connection to the Electronic Trading System may access the Exchange and enter orders via an Exchange-approved ISV;
- 3) Provided that an account has been established and other applicable requirements are met, a customer may place an order to buy or sell commodity futures;
- 4) A Clearing Member initiating, accepting, or executing a transaction must submit such transaction with all required information via the Clearing System;
- 5) Once accepted by the Clearing House, MIAX Futures assumes the position of buyer to the seller and seller to the buyer;
- 6) MIAX Futures increases the open interest (outstanding open commodity contracts in the market for that commodity);
- 7) MIAX Futures marks all open positions to market twice daily, at which time the Clearing House determines the change in market value of all open positions from the prior cycle;
- 8) MIAX Futures notifies Clearing Members of net pay or collect amounts due by account—Clearing Members whose positions lost value must make a timely payment and Clearing Members whose positions gained value receive a payment;
- 9) The settlement of a payment is final and irrevocable at the point that it is effected; and
- 10) The trade is offset, liquidated, or settled by delivery.

During this process, the Exchange performs trade practice, financial, and market surveillance to ensure that market participants are complying with applicable Rules and to foster a just and equitable marketplace. This surveillance is described further within the disclosure.

Key Metrics:

For the calendar year ending December 31, 2024, MIAX Futures’ annual cleared volume by product was as follows:

Product	Volume
Minneapolis Hard Red Spring Wheat Futures	3,129,963
Minneapolis Hard Red Spring Wheat Options	58,772
Bitnomial Bitcoin US Dollar Futures	2,007
Bitnomial Deci Bitcoin US Dollar Futures	93
Bitnomial Hashrate US Dollar Futures	15
Bitnomial Bitcoin US Dollar Options on Futures	452

Although MIAX Futures cleared all Bitnomial Exchange products during the 2024 calendar year, it ceased clearing during the first quarter of 2025 when Bitnomial Exchange transitioned clearing to Bitnomial’s

² An FCM is an individual or organization that (i) solicits or accepts orders to buy or sell futures, options, or swaps and (ii) accepts money or other assets from customers to support such orders.

affiliated clearing house. MIAX Futures did not have any instances where it failed to be operationally reliable for the calendar year ending December 31, 2024. MIAX Futures publishes additional quantitative information through its Quantitative Disclosures for Central Counterparties, which is published and updated on its website.

III. SUMMARY OF MAJOR CHANGES SINCE LAST UPDATE

As required by CFTC regulations, MIAX Futures updates this Disclosure Framework at least every two years and following any material changes to its practices or environment. MIAX Futures has updated its Disclosure Framework to ensure all key considerations under each Principle are clearly addressed as it relates to current practices. Of particular note, since the last published version, MIAX Futures migrated trading platforms from the CME Globex® platform to its own electronic platform, Onyx. MIAX Futures has also made certain changes to reflect its compliance with amended CFTC regulations and has amended certain descriptions related to MIAX Futures offering clearing as a service to other designated contract markets. Other changes were made to clarify or update current Rules and practices.

IV. PRINCIPLE-BY-PRINCIPLE NARRATIVE DISCLOSURE

A narrative response to each Principle and the corresponding key considerations is provided below. Please note that Principles 11 and 24 are not included in this disclosure because they are not applicable to CCPs. Any capitalized terms not otherwise defined within this Disclosure Framework have the meaning given them in the MIAX Futures Rules available on its website.

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PRINCIPLE NARRATIVE DISCLOSURE

PRINCIPLE #1: LEGAL BASIS

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

Key Consideration 1: *The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.*

Regulatory Overview:

MIAX Futures, a for-profit limited liability company, validly organized and duly authorized under the Limited Liability Company Act of the state of Delaware, operates in a highly regulated environment. The Commodity Exchange Act ("CEA") is the U.S. federal law that forms the basis of this framework by regulating the trading of commodity futures in the United States and establishing the statutory structure under which the CFTC functions. Congress created the CFTC in 1974 and in accordance with the CEA, gave the CFTC extensive power to regulate commodity futures and options markets and the authority to implement regulations that are published in Title 17 of the U.S. Code of Federal Regulations. The CFTC's mission is to "promote the integrity, resilience, and vibrancy of the U.S. derivatives markets through sound regulation."

In its regulatory oversight role, the CFTC oversees the operation of designated contract markets ("DCMs") and derivatives clearing organizations ("DCOs"), each of which are required to meet legal requirements to register with the CFTC. MIAX Futures is both a registered DCM and a Subpart C DCO and is thus subject to the jurisdiction of and oversight by the CFTC. To maintain its registration as a DCM and DCO, MIAX Futures has an ongoing obligation to comply with applicable core principles established in the CEA and CFTC regulations. The CFTC evaluates MIAX Futures' compliance with the CEA and CFTC regulations and conducts risk assessments and surveillance through a variety of methods. For example, the CFTC conducts regular reviews, known as rule enforcement reviews, of each DCM's and DCO's ongoing compliance with governing regulations. During these rule enforcement reviews, the CFTC examines items such as MIAX Futures' audit trails, trade practice and market surveillance programs, disciplinary and dispute resolution programs, recordkeeping, financial resources, risk management program, settlement procedures, and default rules. The CFTC Division of Market Oversight conducts these rule enforcement reviews for all DCMs while the CFTC Division of Clearing and Risk has primary responsibility for performing rule enforcement reviews of DCOs. The CFTC also oversees exchanges by imposing strict reporting obligations, including the requirement that MIAX Futures report daily on each Clearing Member's positions and trading activity and provide quarterly reports detailing certain financial information. All MIAX Futures Rules are approved by the Exchange's Officers under delegated authority or the Board of Directors and

must be submitted to the CFTC for certification prior to becoming effective to ensure MIAx Futures' compliance with the CEA and CFTC regulations. The ability of MIAx Futures to enforce its rules and policies to accomplish its core activities has been tested and confirmed in both ordinary and extraordinary circumstances.

As a self-regulatory organization, MIAx Futures has the duty of establishing and enforcing just and equitable trade practices in its marketplace, as well as protecting the public through adequate financial and market surveillance. The Exchange's Market Regulation Department is primarily responsible for carrying out such duties by ensuring that registrants and market participants are complying with applicable provisions of the CEA, CFTC regulations, and MIAx Futures Rules and procedures. Failure to do so may result in fines, suspension, or being barred from trading, and the CFTC may take further action, including banning a participant from the market. In addition, the Exchange is a member of the Joint Audit Committee and Joint Compliance Committee, cooperative organizations that facilitate the sharing of information and oversight of certain market participants.

Further, it is well-established in the U.S. that a DCO's rules are enforceable against its Clearing Members and participants, and no court of law with jurisdiction over the business of MIAx Futures has held that the MIAx Futures Rules were unenforceable. Additionally, state law claims that could affect the trading or operations of a futures market or DCO are preempted by the federal law of the CEA, limiting the risk that actions in a state or local court could undermine application of the MIAx Futures Rules and ensuring that any claims against MIAx Futures related to its regulated activities must be pursued in U.S. federal courts under the CEA's comprehensive legal framework.

Applicability of MIAx Futures Rules and Relevant Jurisdictions:

The Exchange and all registrants and market participants are under the jurisdiction of the CFTC and are subject to the CEA and CFTC regulations. Because MIAx Futures is a Delaware limited liability company and has its principal place of business in the state of Minnesota, certain aspects of the Exchange's activities are also under the jurisdiction of Delaware and Minnesota state law. However, in general, it is well established that state laws that impair operation of a DCO are preempted by the CEA.

Any person or entity that initiates or executes a transaction expressly consents to the jurisdiction of the Exchange and agrees to be bound by and comply with all MIAx Futures Rules in accordance with MIAx Futures Rule 2.1.2. Market Regulation enforces such compliance by performing surveillance and taking disciplinary action when needed.

Legal Basis for the Exchange's Activities:

The material aspects of MIAx Futures' activities that require a high degree of legal certainty given its nature as a registered DCM and DCO are properly provided for in accordance with the CEA, CFTC regulations, and MIAx Futures Rules. The MIAx Futures Rules that provide the legal certainty for its key DCO activities are explained in the following paragraphs.

Novation:

MIAX Futures Rules require that all futures and options contracts be submitted to the Exchange's Clearing House and that all such contracts are subject to MIAX Futures Rules. The point of novation occurs in MIAX Futures Rule 2100.00. when a contract has been accepted for clearing and the Clearing House interposes itself as the buyer to the seller and the seller to the buyer and becomes a legal counterparty with all the rights and liabilities under the relevant contracts as the original Clearing Member parties. Provided no errors occurred, novation cannot be revoked or modified.

Netting:

As required by Part 39 of CFTC regulations and MIAX Futures Rule 2106.00., the Exchange collects initial margin on a gross basis for each Clearing Member's customer account(s) equal to the aggregate of the initial margin that would be required for each individual customer within that account if each individual customer were treated as a Clearing Member. The Exchange does not permit its Clearing Members to net positions of different customers against each other, nor does it do so, in accordance with CFTC regulations. MIAX Futures may collect initial margin for its Clearing Members' house accounts on a net basis. In addition, after a Clearing Member's positions are marked to market, the Exchange nets daily both intra-day and end of day variation margins collected from each Clearing Member by house and customer segregated accounts in accordance with MIAX Futures Rules and CFTC regulations.

Margin Arrangements:

Pursuant to MIAX Futures Rules and as required by CFTC regulations, Members and nonmember customers of a Clearing Member must deposit and maintain initial and maintenance margins in accordance with specified requirements. The Exchange also collects clearing margin to protect against losses incident to transactions for future delivery. In addition, the Exchange has the ability under Rule 2106.00. to collect variation margins from Clearing Members as needed on an intra-day basis. MIAX Futures sets margin requirements at a level that best protects the interests of market participants and the Exchange, provided that such requirements are always in compliance with the standards set forth in CFTC Regulation 39.13(g)(8), as amended. For additional information on margin, please see Principle 6 of this disclosure.

Settlement finality:

All settlements are deemed final and irrevocable pursuant to Rule 2107.00., which specifically states that all payments of funds or transfer of funds to and from MIAX Futures, including, but not limited to, intra-day and end of day variation, margin payments, and security deposits, are final and unconditional when effected and cannot be reversed. In addition, MIAX Futures Rule 2101.00. requires all Clearing Members to maintain an account at a settlement bank approved by the Exchange for purposes of making daily cash settlements for variation and collateral margin with MIAX Futures. MIAX Futures facilitates the transfer of funds through these settlement banks through the use of the Fedwire Funds Service, which enables participants to execute fund transfers that are immediate, final, and irrevocable. For more information on settlement finality, please refer to Principle 8 of this disclosure.

Default Procedures and Bankruptcy:

U.S. Law establishes a clear framework for the management of a default event or a bankruptcy of a Clearing Member, customer, or an exchange. Part 190 of the CFTC Regulations provides a roadmap for the liquidation of an insolvent commodity broker. The U.S. Bankruptcy Code and Part 190 include safe harbors that protect a DCO's right to immediately enforce its interest in the collateral it holds to margin positions and to guarantee performance of its Clearing Members' obligations. Chapter 21 of the MIAX Futures Rules specifies what circumstances constitute default and sets forth procedures for the Exchange to follow in such circumstances. Pursuant to such Rules, if a Clearing Member fails to promptly discharge any obligation to MIAX Futures, the Exchange may apply its security deposits, margins and performance bonds on deposit with MIAX Futures (other than those belonging to a non-defaulting customer), and any of its other available assets to discharge the obligation. In addition, the Exchange may make immediate demand upon any guarantor of the Clearing Member. If a default occurs in a customer account, then MIAX Futures has the right to liquidate and apply toward the default all open positions and customer performance bond deposits in the account of the Defaulting Clearing Member, as well as excess proprietary funds and assets of the Defaulting Clearing Member. Customer funds or margins held in segregated customer accounts cannot be used to discharge a Clearing Member's obligation unless a customer is directly involved in the default.

If the default or insolvency of a Clearing Member causes the Exchange to bear a loss, funds must be applied to the loss in the order of priority set forth in Chapter 21 of the MIAX Futures Rules, with each source of funds to be completely exhausted before the next following source is applied.

Please see Principle 13 of this disclosure for more information on default procedures and relevant MIAX Futures Rules.

Trading Venue:

As of June 29, 2025, all MIAX Futures products are traded on MIAX Futures Onyx, the Exchange's proprietary platform. Prior to that date, all MIAX Futures products traded on the CME Globex® platform, which is a global electronic trading system operated by the Chicago Mercantile Exchange Inc. ("CME"). MIAX Futures and CME had entered into a Services Agreement that governed the listing of MIAX Futures products on the Globex® platform and other related matters, however that Services Agreement terminated, and all MIAX Futures products transitioned to the MIAX Futures Onyx platform. All purchases and sales, and all offers to purchase or sell futures and options contracts are subject to the MIAX Futures Rules. These Rules set forth general trading and clearing Rules, including Rules applicable specifically to electronic trading and access to the electronic platform. In the event of an emergency (as such term is defined in the MIAX Futures Rulebook), the Exchange may suspend trading or take other necessary actions, including but not limited to, amending the hours of trading, margin requirements, price limits, deadlines, reporting requirements, default procedures, and give-up procedures.

Clearing:

MIAX Futures clearing activities predominately involve counterparties and related exposures to institutions organized in the U.S., including its Clearing Members. MIAX Futures Rules stipulate that any person

executing a transaction directly or indirectly consents to the jurisdiction of MIAX Futures and is bound by its rules. MIAX Futures Rules are legally binding on all participants and are governed by U.S. law. Additionally, as a Subpart C DCO, MIAX Futures is obligated to comply with Subparts A, B, and C of Part 39 of CFTC Regulations. Consequently, MIAX Futures has a clear and more stringent legal framework under which it operates. The ability of the MIAX Futures Clearing House to enforce its rules and policies is well established and has been tested and confirmed over decades of operation.

Key Consideration 2: *An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.*

PFMI #1

All MIAX Futures Rules have been submitted to and approved by the Exchange Officers under delegated authority or the MIAX Futures Board of Directors and certified with the CFTC to ensure that they meet and are consistent with relevant laws and regulations. These Rules may be amended or added to from time to time due to regulatory changes, technical developments, changes in Exchange or market procedures, etc. as required. Any amendment or addition to these Rules and Bylaws must, after approval by the Exchange Officers under delegated authority or by the Board, be submitted to the CFTC for certification prior to becoming effective. These amendments and additions are posted on the MIAX Futures website prior to adoption, as well. This process ensures that MIAX Futures Rules are clear, understandable, enforceable, and consistent with the CEA and CFTC regulatory framework. As of the date of this disclosure, no inconsistencies have yet been identified, and MIAX Futures Rules have not been subject to judicial controversy.

Key Considerations 3: *An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.*

PFMI #1

As explained above, among other areas, CFTC regulations require DCOs to address netting arrangements, settlement of funds, and default procedures within their legal framework. The Exchange has adopted MIAX Futures Rules to address each of these areas to provide legal certainty. The MIAX Futures Rules and Bylaws provide the legal basis for all the Exchange's core activities.

All MIAX Futures Rules, and all additions or changes to such Rules, must be approved by the MIAX Futures Board of Directors and the CFTC prior to becoming effective. The Exchange publishes and makes the MIAX Futures Rules readily available to the public on the MIAX Futures Website. Furthermore, all MIAX Futures Clearing Members are notified via published alerts of any approved amendments to the Rules. The Exchange has made the MIAX Futures Rules, as well as all requested procedures, policies, and manuals, available to the CFTC as the relevant oversight authority.

Key Consideration 4: *An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.*

PFMI #1

MIAX Futures is a legally formed Delaware limited liability company, and its purpose is to engage in any lawful act or activity. Delaware's Limited Liability Company Act gives every limited liability company the power to conduct and transact any lawful business, make contracts, and exercise any other incidental powers—state law therefore does not prohibit or hinder any of MIAX Futures' actions as a legal entity. Because the Exchange has registered with the CFTC and is subject to its ongoing oversight, MIAX Futures also has the specific authority to act as a DCO and DCM and exercise its powers as such.

Any person or entity that initiates or executes a transaction expressly consents to the jurisdiction of the Exchange and agrees to be bound by and comply with all MIAX Futures Rules and procedures, as well as any amendments and modifications. By requiring that its Rules go through the approval process described under Key Considerations 2 and 3 and submitting all amendments to the CFTC for certification prior to becoming effective, the Exchange can achieve a high degree of certainty that its Rules procedures, and contracts will not be voided or subject to a stay. As of the date of this disclosure, MIAX Futures Rules have not been subject to judicial controversy, and actions taken under the Exchange's Rules, procedures, and contracts have not been voided or overturned by an administrative or judicial authority.

Key Consideration 5: *An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.*

PFMI #1

MIAX Futures is a Delaware limited liability company and has its principal place of business in Minnesota. It conducts business only in the United States, where it is under the oversight of the CFTC, and is bound by all relevant U.S. laws and regulations. MIAX Futures operates within the U.S. legal framework and the enforceability of its Rules are established under such framework.

In 2016, the European Securities and Markets Authority ("ESMA") recognized MIAX Futures as a third-country CCP. While registration with ESMA was not a requirement for its business activities, the Exchange believed recognition would be in the best interest of its market participants. Its status as third-country CCP in the European Union does not, however, give rise to any conflict of law risks. Rather, its status is largely predicated on the general supervisory equivalence in the U.S. and the European Union, and MIAX Futures continues to operate under the U.S. regulatory framework and the CFTC's jurisdiction.

In addition, in March of 2019 MIAX Futures notified the Bank of England of its intent to enter into the Temporary Recognition Regime that is currently in place for non-United Kingdom CCPs in accordance with relevant statutory provisions. In 2021, MIAX Futures applied for permanent recognition as a non-UK, third-country CCP with the Bank of England. The UK has largely adopted the same framework as ESMA.

Consequently, MIAX Futures fully expects to continue to operate under the U.S. regulatory framework and the CFTC's jurisdiction, as it does in the European Union.

PRINCIPLE #2: GOVERNANCE

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Key Consideration 1: *An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.*

The Exchange is a Delaware limited liability company. Its main objective, which is reflected in its mission, is to provide and oversee a fair, reliable, and efficient marketplace for the products and services offered by the Exchange. MIAX Futures achieves this objective through a variety of methods. First, the Board has established and documented the general framework under which the Exchange operates in the MIAX Futures Bylaws and Rules, which have been submitted to the CFTC, and in related governance policies. To ensure such governance arrangements are clear and transparent, the Exchange posts these documents (other than those policies deemed confidential) on its public Website. These policies include:

- MIAX Futures Board of Directors Declarations and Oversight Policy;
- MIAX Futures Board of Directors Disclosure Policy;
- MIAX Futures Governance Policy;
- MIAX Futures Board of Directors Code of Ethics and Conduct;
- MIAX Futures Conflicts of Interest Policy and Procedure; and
- MIAX Futures Performance Review of Board of Directors Policy

As stated in the Board of Directors Declarations and Oversight Policy, the Exchange places a high priority on the safety and efficiency of MIAX Futures and supports the stability of the broader financial system and other relevant public interest considerations of Clearing Members, customers of Clearing Members, and other relevant stakeholders. To ensure that these priorities are achieved, MIAX Futures, as a self-regulatory organization, enforces its Rules and other applicable requirements to ensure just and equitable trade practices in its marketplace, as well as to protect the public. Market Regulation is primarily responsible for carrying out such duties by ensuring that stakeholders, including market participants, are complying with applicable requirements through trade practice, market surveillance, and financial surveillance programs and enforcing instances of non-compliance through fines and disciplinary actions. The Regulatory Oversight Committee of the Board of Directors further oversees the fulfillment of MIAX Futures' self-regulatory obligations and advises the Board with respect to such duties when appropriate.

Within the framework established by the Board, the Clearing House is responsible for carrying out certain risk management duties that are approved by the Board and mitigate different types of risk, such as credit and liquidity risk. The Clearing House has secured various credit facilities and maintains a guarantee fund in case of participant default, both of which increase stability and help manage risk. The Risk Committee of the Board of Directors, the Risk Management Committee, and the Risk Team help ensure that appropriate procedures are established and followed to accomplish this objective. In addition to executing and measuring its achievement of the objectives above, as a for-profit organization, MIAX Futures also takes its financial profitability into consideration. Profitability provides additional financial stability for the products and services offered by MIAX Futures, which is another one of the Exchange's priorities.

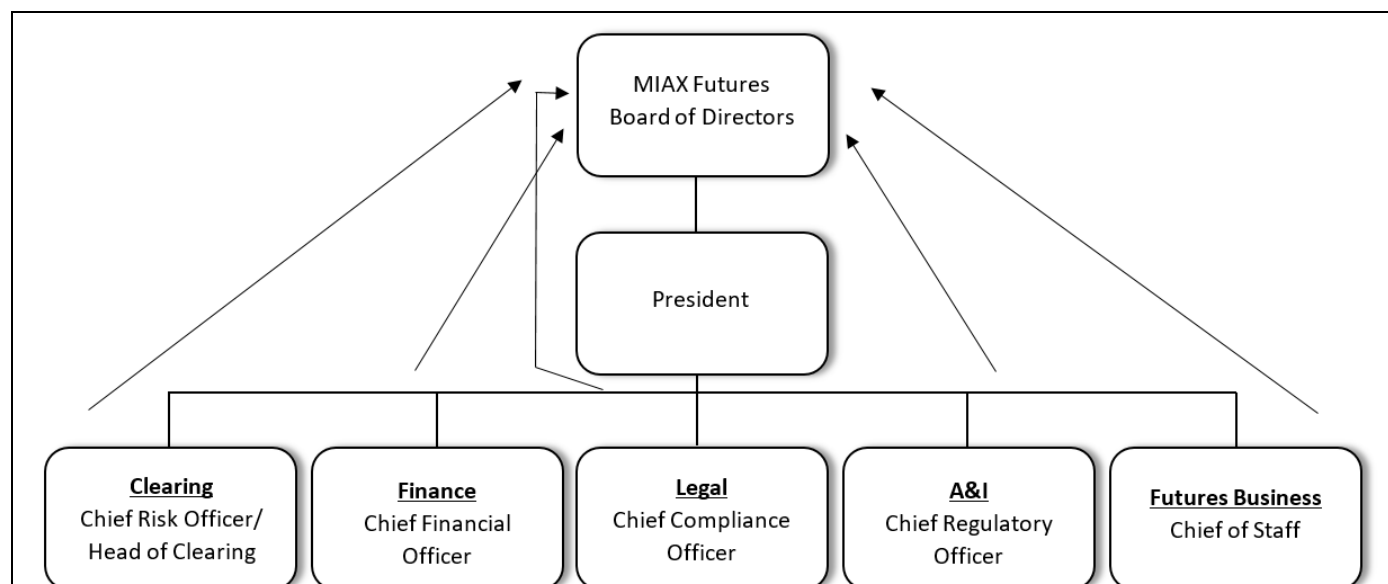
Key Consideration 2: *An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.*

PFMI #2

The governance arrangements of the Exchange are documented in its Bylaws, Rules, Board of Directors Declarations and Oversight Policy, and Governance Policy, which are available on the MIAX Futures Website. The Bylaws, in particular, establish MIAX Futures' governance arrangements, detailing the composition requirements of the Board and describing the nomination process and election of Board Directors, the Board's powers and meetings, identification of all committees and their respective powers and duties, and the appointment of MIAX Futures officers and their powers and duties. For more details and information on responsibilities, please refer to MIAX Futures' Bylaws, which are disclosed on the MIAX Futures Website.

Responsibilities and Accountability:

The executive management of the Exchange is comprised of the President and the five staff members shown in the following executive organizational table:



These officers and executives perform the duties described in the MIAX Futures Rules, Board of Directors Declarations and Oversight Policy, and in the Governance Policy. As depicted in the organization chart above, executive management reports to the President, but they are also responsible for reporting to the Board of Directors and at times, to committees of the Board or Exchange. The Board of Directors may make inquiries of management at any time or express their opinions, concerns, or suggestions. Although the Board has delegated certain powers related to the daily business of the Exchange to Exchange Officers, executive management remains accountable to the Board, whose approval is required for major decisions, significant expenditures of funds, and to pass certain amendments to MIAX Futures Rules. In addition, unless delegated to the President, Board committees may conduct performance evaluations of the Chief Regulatory Officer and Chief Risk Officer. Further accountability is achieved by employing outside legal counsel and auditors.

In order to carry out the operations and achieve the objectives of the Exchange described in *Key Considerations 1 and 2*, a number of departments exist that report to executive management, while some report directly to executive management at Miami International Holdings, Inc.. The responsibilities of the employees in these departments are summarized in their job descriptions, as are lines of accountability. Executive management monitors employees through performance evaluations and various internal controls that are documented in the Employee Handbook.

In addition to the types of accountability discussed above, the Exchange also takes steps to provide broader accountability to relevant stakeholders, including its sole member and owner, M 402 Holdings, LLC; MIAX Global Derivatives, LLC, the sole member of M 402 Holdings, LLC; Miami International Holdings, Inc., the sole member of MIAX Global Derivatives, LLC; and market participants. For example, MIAX Futures maintains a website where it publicly posts its Rulebook, this disclosure, market information, news releases, notice of entity affiliations, any other notices or alerts, and other announcements, all of

which increase transparency, which is a necessary component of accountability. Further, any person may inquire of or send comments to the Board or the Exchange, file a complaint, or report a possible violation of MIAX Futures Rules with Market Regulation.

The Exchange Board and committees are composed of individuals with different areas of expertise, including, but not limited to, finance, risk management, and the derivatives industry. This structural composition ensures that many different backgrounds and viewpoints are brought forth as part of all discussions regarding any potential decisions or changes that may affect MIAX Futures Rules, policies, or procedures, which consequently affect stakeholders. Certain Exchange committees also include non-Board members to provide other stakeholders, such as market participants, an opportunity to voice their suggestions and concerns. In accordance with CFTC Regulations on governance, MIAX Futures has developed a new Exchange Committee, the Risk Management Committee, which is comprised of representatives from clearing members and customers of clearing members. MIAX Futures also maintains a Risk Advisory Working Group, which has clearing member and customer of clearing member representatives. These groups play an important role in MIAX Futures' risk framework and governance structure by providing industry expertise from a variety of stakeholders. By achieving diversity in background and skill sets through its governing structure, MIAX Futures can ensure that its framework supports a transparent, fair, and efficient marketplace. As a result, this brings additional accountability and stability to relevant stakeholders and market participants.

By posting the governance arrangements described in the preceding paragraphs to its website, MIAX Futures is able to widely disclose such arrangements to the general public. The MIAX Futures Bylaws, Rules, all governance policies, the Certificate of Formation, this PFMI Disclosure, and the list of members of the Board of Directors, committee members, and executive management are all available on the MIAX Futures Website. Market Regulation's internal Compliance Manual, which describes the department's responsibilities and procedures for trade practice, financial surveillance, and market surveillance, is updated and submitted annually to the CFTC, as the relevant oversight authority, and other information is provided to the CFTC upon request. The CFTC also periodically reviews these governance arrangements and other information when conducting rule enforcement reviews.

Key Consideration 3: *The roles and responsibilities of an FMI's board of directors should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.*

PFMI #2

Board Roles and Responsibilities:

The roles and responsibilities of MIAX Futures' Board of Directors are clearly specified in the Bylaws and Board of Directors Declaration and Oversight Policy as noted under *Key Consideration 2*. Directors have a duty to discharge their responsibilities in good faith and in a manner reasonably believed to be in the

best interests of the Exchange. Director duties, along with an explanation regarding the necessity of confidentiality for Board business, are discussed and expanded upon in materials given to the Board on an annual basis, including the Code of Ethics and Conflicts of Interest Policy and Procedure.

Conflicts of Interest:

In addition to specifying the responsibilities of the Board of Directors, MIAX Futures Bylaws prescribe procedures the Board must follow when a potential conflict of interest arises. In general, Bylaw 12.8. requires Directors and committee members to abstain from deliberating and voting on matters where there is a potential conflict of interest, a determination that Market Regulation is responsible for making and enforcing. Further information regarding conflicts of interest is set forth in the Board of Directors Code of Ethics and Conduct and the Conflicts of Interest Policy and Procedure, which are available on the MIAX Futures Website. The Board of Directors Code of Ethics and Conduct provides additional information on conflicts of interest and reinforces a Director's duty to identify a conflict and, if required, remove himself or herself from the conversation and any voting on the matter. The Conflicts of Interest Policy and Procedure further defines a conflict of interest and a MIAX Futures Board Director's corresponding obligations. The policy also contains an acknowledgment form that MIAX Futures Directors must complete annually to disclose any affiliations that may give rise to a potential conflict or duality of interest. In accordance with this policy, each Director is therefore required to attest to the following disclosure requirements at least annually:

- A.** If the Director is a named party of interest or if he or she has a financial interest³ in a named party of interest, to a matter to be considered by the Board;
- B.** If the Director is an officer, director, employer, employee, or fellow employee of a named party of interest to a matter to be considered by the Board;
- C.** If the Director has a financial interest in a direct or indirect competitor to a named party of interest to a matter to be considered by the Board;
- D.** If the Director is an officer, director, employer, or employee of a direct or indirect competitor to a named party of interest to a matter to be considered by the Board;
- E.** If the Director is associated through a "broker association" as defined in CFTC Regulation 156.1, as amended, with a named party of interest to a matter to be considered by the Board;
- F.** If the Director has other significant, ongoing business relationships with a named party of interest, not including relationships limited to executing futures or options

³ "Financial interest" exists if a Director has, directly or indirectly, through business, investment or an immediate family member (child, parent, sibling, spouse, documented domestic partner, grandparent, grandchild or in-law and by anyone else who shares their household): (a) an ownership or investment interest in excess of 5% of any entity with which MIAX Futures has a transaction or contractual arrangement (including joint ventures); (b) a compensation arrangement with MIAX Futures or with any entity or individual with which MIAX Futures has a transaction or arrangement, in which the compensation is in excess of \$100,000 in any year; or (c) a potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which MIAX Futures is negotiating a transaction or arrangement which would meet the thresholds of (a) or (b).

transactions opposite of each other or to clearing futures or option transactions through the same clearing member.

- G.** If the Director serves in any capacity with or on behalf of any party, regardless of intent, in which the Director believes that the requested service is to assist the party in obtaining a contract with MIAX Futures.
- H.** If the Director serves on any other corporate boards and/or committees.
- I.** If the Director is a member, or his/her employer is a member, or has financial interest in any other derivatives or financial entity, including but not limited to exchanges, broker dealers, futures clearing merchants.

If the Board, Market Regulation, or the President has reason to believe that a Board or committee member has failed to disclose an actual or potential conflict or duality of interest, it will inform the individual and afford him or her an opportunity to explain the alleged failure to disclose. If the Board determines that the person in fact failed to properly disclose such information, it will take appropriate disciplinary and corrective action. Sanctions may range from a reprimand to removal of the Director.

The Conflict of Interest Policy and Procedure is posted on the MIAX Futures Website and available to the general public. Management and the legal department regularly review the MIAX Futures Rules and Bylaws as well as all MIAX Futures Policies and Procedures, including the Conflicts of Interest Policy and Procedure, to ensure all amendments and updates are completed as needed.

Review of Board:

In accordance with the Performance Review of Board of Directors Policy, the Chief Compliance Officer, who attends Board meetings, is responsible for conducting a review of the Board of Directors' performance as a whole, as well as a review of each individual Director, on an annual basis following the last Board meeting of the fiscal year or at any time that it appears the Board or a Director may not be fulfilling its duties. The Chief Compliance Officer bases his or her review of the Board and individual Directors on the following:

- A.** Adhering to the MIAX Futures Governance Policy;
- B.** Abiding by the MIAX Futures Board of Directors Declarations and Oversight Policy;
- C.** Abiding by the MIAX Futures Board of Directors Code of Ethics and Conduct;
- D.** Abiding by the MIAX Futures Conflicts of Interest Policy and Procedure;
- E.** Attending Board meetings, either by person or remotely;
- F.** Attending committee meetings (if the Director has been appointed to a committee).

The findings of the Chief Compliance Officer following a review are filed with the executive office of the Exchange for the President's consideration and given to the Nominations Committee for review prior to the committee's nomination of candidates pursuant to the Nominations Committee Charter. If the Chief Compliance Officer determines that a Director failed to adequately carry out his or her duties, the Director may be reprimanded or removed from the Board by M 402 Holdings, LLC, the sole member of the Exchange. In the event that such Director is up for election, the Nominations Committee may remove such Director from the list of candidates.

Key Consideration 4: *The board should contain suitable members with the appropriate skills and incentives to fulfill its multiple roles. This typically requires the inclusion of non-executive board member(s).*

PFMI #2

The Exchange believes that it is in its and all stakeholders' best interest to retain the most qualified Directors possible since doing so will ultimately aid in the achievement of MIAX Futures' long-term objectives. In order to ensure that the Board of Directors is composed of individuals with a broad range of skills and experience, the Nominations Committee assesses potential candidates who are qualified to serve pursuant to MIAX Futures Bylaws and the Nominations Committee Charter. This charter requires the Nominations Committee to assess potential candidates based on the candidate's relevant skills and experience, any pertinent disciplinary history, conflicts of interest, and other fitness considerations. MIAX Futures Board Member candidates are also required to pass a background check and NFA check. To attract and retain the best talent, the Exchange offers stipends to its Directors. MIAX Futures reviews and increases stipend amounts periodically in an effort to continue to attract and retain the best possible Board candidates. The Exchange also reimburses travel expenses to encourage participation by qualified individuals outside of the Minneapolis area.

Another way the Exchange attains a broader range of skills and candidates is by including a minimum of thirty-five percent Public Directors on its Board in accordance with MIAX Futures Bylaws. By definition, each of these Directors is required to be independent, meaning the individual cannot have a material relationship with MIAX Futures (i.e., a relationship that reasonably could affect the independent judgment or decision making of the Director). In accordance with CFTC regulations, a Director is considered to have a material relationship with the Exchange if any of the following circumstances exist or have existed in the past year:

- A. The Director is an officer or employee of the Exchange;
- B. The Director is an officer or director of a Member;
- C. The Director, or a firm with which the Director is affiliated, receives more than \$100,000 in combined annual payments from the Exchange, or from any person or entity affiliated with a Member of the Exchange; or

- D.** Any of the relationships above apply to the Director's immediate family (spouse, parents, children, and siblings).

MIAX Futures provides a list of all current Directors on its Website.

Key Consideration 5: *The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.*

PFMI #2

In addition to helping the Exchange achieve its long-term objectives stated in *Key Consideration 1*, the roles and responsibilities of MIAX Futures officers, including the President, CEO, Secretary, Treasurer, Chief Regulatory Officer, Chief Compliance Officer, and Chief Risk Officer, are set forth in MIAX Futures Bylaws 5.1., 5.2., 5.3., 5.5., 6.1., 6.2., and 6.3. Additional director and management roles and responsibilities are specified in the Board of Directors Declarations and Oversight Policy and the Governance Policy.

Reviews assessing an individual's performance with respect to his or her responsibilities are performed annually for officers and executive management. Each member of executive management is responsible for evaluating the performance of all employees reporting to him or her.

MIAX Futures ensures that its management has the appropriate experience, skills, and integrity by requiring these attributes when hiring. In particular, and as noted in hiring policies, the Exchange seeks out individuals with relevant backgrounds and experience specific to the position requirements. MIAX Futures' current management, for example, has a variety of skills and experience, including degrees in areas of accounting, law, economics, and management. Most executives have also worked at the Exchange for many years in different capacities and participate in industry groups such as Futures Industry Association, National Futures Association, Joint Compliance Committee, Joint Audit Committee, Commodity Markets Council, CCPGlobal, and Intermarket Surveillance Group.

In the event that MIAX Futures should need to remove a member of its management, it has the ability to do so. All MIAX Futures employees are employees-at-will, meaning the Exchange may terminate the employment relationship at any time, without prior notice and for any reason. The President therefore has the discretion to remove any employee from management or from his or her employment at the Exchange. The Board of Directors has the power to remove the President and to appoint new officers.

Key Consideration 6: *The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crisis and emergencies. Governance arrangements should ensure that the*

risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.

PFMI #2

The Board has established and approves on an ongoing basis the risk management framework of the Exchange in the MIAX Futures Rules, which are certified with the CFTC. Additionally, while MIAX Futures' risk management framework is documented in the Rulebook, the Risk Team, which includes the President and Chief Risk Officer, along with employees from the Clearing House, financial surveillance, and legal, has been delegated the power to execute and monitor all requirements and addressing any situations that arise. The Risk Team also has the authority and independence to make decisions in emergency circumstances, though the Board retains ultimate responsibility for the risk management framework. Together, the Rulebook and internal risk management policies and procedures create a comprehensive plan for risk management and set forth procedures for members of the Risk Team to follow.

MIAX Futures may amend its Rules, which comprise the risk management framework, due to changes in the market, the Exchange, CFTC Regulation changes, or because of technical developments. Material changes to the risk management framework may be posted to the Website for comment by market participants. Moreover, the Risk Team, along with the Exchange's legal department, is continually reviewing proposed and final CFTC regulations for any other necessary amendments or additions to the risk management framework. However, any proposed new or amended Rules must be approved by the Exchange Officers under delegated authority or the Board and the CFTC. The President, Chief Risk Officer, Chief Compliance Officer, Chief Regulatory Officer, or a legal representative may report any such proposed changes to the framework to the Risk Management Committee or the Board, as appropriate. In addition, the Risk Committee has the ability to review and question all risk policies and procedures at any time. The Board, Risk Committee, and Risk Team collectively oversee the risk framework of the Exchange, and because of their differing governance and composition structures, each group brings a different viewpoint to bear on any decisions or changes made. By affording each an opportunity to independently assess the effectiveness of such framework, MIAX Futures ensures that issues are considered from different viewpoints.

The risk management framework established by the Board includes the use of various risk management models. One model utilized for such purposes is a margin methodology model that is explained in more detail in Principles 4 and 6. The margin methodology model and all corresponding models are assessed and validated on an ongoing basis by an independent consultant that is not involved in the actual development or implementation of any risk management models. This consultant evaluates the models to verify that they are conceptually sound and validates the processes and benchmarks used. Changes to the margin model In the Risk Manual are submitted to the CFTC.

Key Consideration 7: *The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other*

relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

PFMI #2

As discussed in *Key Consideration 1*, MIAX Futures' main objective is to provide and oversee a fair, reliable, and efficient marketplace — a mission that also supports the interests of stakeholders and market participants. In addition, pursuant to the Board of Directors Declarations and Oversight Policy, the Board is responsible for ensuring that MIAX Futures' design, rules, overall strategy, and major decisions appropriately reflect the legitimate interests of Clearing Members, customers of Clearing Members, and other relevant stakeholders. Because of this objective, MIAX Futures Rules, overall strategies, and major decisions must all align with this overarching mission and thus reflect the interests of other participants and stakeholders. As noted previously, amendments or additions to MIAX Futures Bylaws and Rules require the approval of the Exchange Officers under delegated authority or the Board prior to being submitted to the CFTC. Further, certain proposed amendments or additions are posted on the MIAX Futures Website for public comment prior to adoption. In addition, the diversity of Directors on the Board, including Public Directors, ensures that different viewpoints are represented when making decisions. Stakeholders with diverse backgrounds within and outside of the derivatives industry also directly participate in committees of the Exchange, including the Risk Management Committee, Cash Markets Committee, Minneapolis Hard Red Spring Wheat Committee, Disciplinary Committee, and the Hearing Committee. Lastly, direct or indirect participants may contact MIAX Futures staff or Directors to voice their opinion or give feedback, and Directors may communicate with Exchange staff at any time.

In order to manage potential conflicts of interests between market participants and the views of the Exchange, the Board adopted MIAX Futures Bylaw 12.8., which states that members of committees of the Exchange must abstain from deliberating and voting on matters when there is a potential personal or financial conflict of interest. Additional conflict of interest provisions applicable to the Disciplinary and Hearing Committees are set forth in MIAX Futures Rules 8.2. and 9.2., which generally provide that no person is able to serve as a member of either committee if the person, or entity with which the person is affiliated, has a financial, personal, or prejudicial interest or concern in the matter under consideration.

In accordance with PFMI Explanatory Note 3.2.18, major Board decisions are disclosed to relevant stakeholders and the public, provided that such disclosure would not endanger candid Board debate or commercial confidentiality. Before the disclosure of a major decision could be restricted, MIAX Futures would evaluate a number of factors in accordance with the Board of Directors Disclosure Policy available on the MIAX Futures Website. Disclosures are generally made through MIAX Futures news releases and alerts, and more regularly through Rulebook amendment notices and other email notices.

PRINCIPLE #3: FRAMEWORK FOR THE COMPREHENSIVE MANAGEMENT OF RISKS

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Key Consideration 1: *An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.*

The MIAX Futures Board of Directors has developed a sound risk-management framework for identifying, measuring, monitoring, and managing risks that arise in or are borne by the Exchange, including credit, legal, liquidity, and operational risks. The Board established this framework within MIAX Futures Rules, which are certified by the CFTC. In particular, Chapter 21 of the MIAX Futures Rulebook primarily contain the Exchange's policies with respect to risk management and set forth the roles and responsibilities of all involved parties.

The Exchange manages credit risk through a variety of methods, such as marking open positions to market twice daily and requiring Clearing Members to make security deposits and pledge margin based upon open positions held at MIAX Futures. Other policies and procedures utilized by the Exchange in monitoring and mitigating daily credit risks include real-time risk monitoring and financial surveillance programs. Furthermore, as explained in detail in Principle 4, credit risk arising from the potential default or insolvency of a Clearing Member is also monitored via extreme but plausible market movements through daily stress testing of Clearing Member portfolios. In addition, credit risk stemming from the potential default or insolvency of a settlement bank is monitored and managed by requiring MIAX Futures' approval for all settlement banks, conducting financial reviews of the banks, and using the Fedwire Funds Service to limit MIAX Futures' exposure time and ensure timely and accurate transfers of funds.

The legal department of the Exchange monitors and manages legal risks by constantly reviewing proposed and new regulations and participating in industry groups to ensure that MIAX Futures is complying with all applicable laws and requirements. In addition, as described in Principle 1, MIAX Futures ensures that its activities have a well-founded legal basis.

Liquidity risk, as described in Principle 7, arises because of the possibility of MIAX Futures' participants or other entities failing to meet their payment obligations when due. The Exchange manages this risk by holding sufficient liquid resources to meet its payment obligations in the event of a default of the participant and its affiliates that would generate the largest aggregate payment obligations in extreme but plausible market conditions and as further explained in Principle 7.

As set forth in Principle 17, operational risk can arise from deficiencies in information or internal systems or from external events, such as operational failures or breakdowns. MIAX Futures has developed a number of controls and policies to mitigate such risks, including business continuity plans and redundant connections. These items are described within Principle 17.

Although the Risk Team is responsible for executing and monitoring all risk management requirements and addressing situations that may arise, various committees, the Board, and executive management are ultimately responsible for managing the Exchange's risks. As a result of managing these risks, committees, the Board, and executive management are aware of all risks and exposures borne by MIAX Futures and there is no segmentation.

The Risk Team and other members of management work together to develop and maintain risk management policies, procedures, and systems. Such policies and procedures are approved by the Board, and if codified in the Rulebook, are also submitted to the CFTC. The Exchange tests new policies, procedures, and systems and further assesses their effectiveness by evaluating their sufficiency based upon historical changes. For example, MIAX Futures conducts rigorous backtesting of its margin setting methodology to ensure that margins have been set at an appropriate level by comparing each margin level with the respective daily price movement for each contract or calendar spread. The Risk Team also performs a margin sensitivity analysis in which it reviews margin accuracy. The Risk Team continually reviews all policies, procedures, and systems for possible improvements and makes adjustments based upon relevant changes in the market environment.

Key Consideration 2: *An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.*

PFMI #3

The Exchange provides its market participants and their customers with information relevant to managing and containing their risks through the MIAX Futures Rulebook, policies and procedures, news releases, and market contract specifications, all of which are publicly available on the Exchange's Website, and by setting margin and security deposit requirements quantitatively. MIAX Futures also incentivizes participants to manage and contain the risks they pose to the Exchange by taking disciplinary actions, including imposing financial penalties, against participants that fail to meet the established deadlines, reporting requirements, or otherwise comply with the requirements set forth in the MIAX Futures Rulebook.

The Exchange designs its policies and systems to allow participants to effectively manage and contain their risks. For example, MIAX Futures issues daily files that set forth the established margin requirements and other risk parameters and makes a number of risk protections available on its Onyx trading platform, including pre-trade risk management controls for electronic order and trade activity.

Key Consideration 3: *An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.*

PFMI #3

MIAX Futures regularly assesses its risks resulting from interdependencies with other entities that the Exchange mitigates by employing various risk management tools. The primary risk identified stems from its banking relationships. Since the transfer of funds occurs through settlement banks, MIAX Futures has identified the potential insolvency of a settlement bank as a risk. The Exchange manages this risk by maintaining relationships with multiple banks, requiring Clearing Members to use financial institutions approved by MIAX Futures, and monitoring banks on an ongoing basis through financial reviews that evaluate, among other items, a bank's capital resources and liquidity.

Key Consideration 4: *An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.*

PFMI #3

As described in Principles 4, 7, 15, and 17, MIAX Futures has identified a number of scenarios that could potentially prevent the Exchange from providing its critical operations if not managed properly. For example, the default or insolvency of a Clearing Member would expose MIAX Futures to credit risk that could potentially prevent it from providing its operations and services. However, the Exchange manages this risk by, among additional items noted within this disclosure or on the MIAX Futures Website, marking open positions to market twice daily, requiring Clearing Members to pledge margin and security deposits, maintaining a guaranty fund, and conducting daily stress tests and other risk management procedures. MIAX Futures has similarly developed and implemented tools and methods to mitigate other risks that could potentially prevent the Exchange from providing its critical operations—each of these risks and the manner in which MIAX Futures manages them are explained in other Principles within this disclosure.

In addition, as explained further within Principles 4, 7, 15, and 17, the Exchange has also implemented the necessary Rules, along with a viable plan, to ensure a recovery or orderly wind down of operations if necessary. Such recovery and wind-down plan includes a thorough assessment of the effectiveness of its tools and procedures in a recovery or wind-down situation. The plan also requires that if MIAX Futures enters into recovery or wind-down, the Exchange would provide relevant authorities with all necessary information for purposes of resolution planning, as mandated by CFTC regulations.

PRINCIPLE #4: CREDIT RISK

An FMI should effectively measure, monitor, and manage its credit exposure to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or

that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest participants and their affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions. All other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one participant and its affiliates that would potentially cause the largest aggregate credit exposures to the CCP in extreme but plausible market conditions.

Key Consideration 1: *An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.*

In its role as a CCP, MIAX Futures is exposed to credit risk stemming from the potential inability of Clearing Members to meet their financial obligations. The MIAX Futures Board of Directors has instituted a framework for managing its credit risk within its Rules, which are certified by the CFTC. More specifically, the Exchange's framework mitigates its exposure through margin requirements, variation margin, security deposits, and other processes that are described in detail in this Principle.

Since MIAX Futures facilitates the transfer of funds between settlement banks, MIAX Futures has also identified the potential insolvency of a settlement bank as a credit risk. However, the Exchange's framework helps mitigate this exposure by requiring Clearing Members to use banks approved by MIAX Futures pursuant to its Rules. Within this framework, the Exchange has developed policies and procedures for reviewing and approving of settlement banks, as explained further below and in Principle 9.

MIAX Futures reviews this framework for managing risk whenever necessary or appropriate based on changes in market conditions or practices, open positions, products offered, the delivery process, advancements in risk management or financial surveillance, etc. or as a result of new or revised CFTC requirements or best practices from another legal or governing body. Moreover, since MIAX Futures Rules are constantly being reviewed, management may propose changes or additions to the framework in an effort to more effectively mitigate credit risk. Similarly, the Board of Directors or a committee also may recommend changes or raise the possibility of adding to or changing the framework.

Key Consideration 2: *An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.*

PFMI #4

As a DCO, MIAx Futures serves as a counterparty to every cleared transaction, and credit risk is thus inherent in its operations. In particular, the Exchange has identified two primary sources of credit risk, which are the potential default or insolvency of a Clearing Member or the insolvency of a settlement bank. MIAx Futures developed its risk management framework, as approved by the Exchange's Board of Directors and the CFTC, to identify and mitigate these sources of credit risk. MIAx Futures uses a variety of methods to manage its risk resulting from the potential default or insolvency of a Clearing Member or insolvency of a settlement bank.

One of the primary methods that MIAx Futures uses to measure and manage daily credit exposures from Clearing Members is to mark open positions to market twice daily. For any variation cycle, the Clearing House determines the change in market value of all open positions from the prior cycle and communicates and reports these financial results to its Clearing Members. MIAx Futures requires a timely payment from Clearing Members whose positions lost value for any variation cycle, enforced by a schedule of deadlines and fines, and correspondingly makes payments to Clearing Members whose positions gained value. By conducting a morning variation cycle, MIAx Futures captures price fluctuations around 10:30 a.m. Central Time, which reduces the risk posed to the Clearing House for end-of-day settlements. MIAx Futures conducts the second variation cycle at the end of the trading day based upon contract settlement prices. Although the Exchange's standard procedure is to mark open positions to market at least twice daily, the Clearing House has the capability to mark-to-market more frequently should conditions warrant. Marking open positions to market twice daily, as well as at any other time that conditions dictate, serves to control credit risk by allowing MIAx Futures to frequently remove accumulated debt obligations among market participants. Furthermore, MIAx Futures has the ability to recalculate real-time exposures, thereby allowing for real time monitoring of such exposures.

In addition to conducting two variation cycles, MIAx Futures further mitigates its credit risk by requiring its Clearing Members to pledge margin based on open positions held at MIAx Futures in each contract. As noted in the MIAx Futures Rules, the Exchange establishes minimum initial and maintenance margin levels for all cleared products. MIAx Futures reviews these minimum margin levels on a daily basis to ensure their adequacy and may adjust such levels if appropriate after issuing a notice to the marketplace. While reviewing a broad set of general market fundamentals each day, MIAx Futures computes and adjusts margin requirements based upon expected volatility derived from historical price movements, national spot index values, implied volatilities, volume and open interest levels, and price fluctuations in other similar markets. For a more detailed description of the Exchange's methodology for calculating margin requirements, refer to *Key Consideration 4*.

MIAx Futures employs a number of tools to control and mitigate its sources of credit risk stemming from Clearing Members. As explained further in *Key Consideration 4*, the Exchange uses risk-based margin methodologies and models, reviewed by the CFTC, to estimate volatilities and determine appropriate margin requirements expected to cover exposures and reduce credit risk posed by market fluctuations. While MIAx Futures conducts these analyses on an overall market level, MIAx Futures may also increase margin requirements for an individual market participant whose positions are unduly insecure or hazardous

in accordance with MIAx Futures Rule 2106.00. In addition to margin, MIAx Futures requires all Clearing Members to make security deposits to mitigate the credit risk to MIAx Futures in the event of a Clearing Member's default or insolvency. The Exchange determines security deposit requirements based upon current and historical open positions, daily performance bond requirements, concentration of positions held, daily volume, financial statement reviews, the number of required regulatory filings, and any other relevant metrics on a rolling quarter. Reviews of these security deposits are performed at least twice per month to confirm that the amount held is appropriate given the risk factors identified.

In addition to the tools above, MIAx Futures also uses other tools for managing credit risk. Among the additional tools MIAx Futures employs to manage credit risk are the MIAx Futures Onyx Risk Protections. These Risk Protections include per order risk metrics (including maximum and minimum order size and price), cumulative risk metrics (which provide firms with the ability to limit their credit exposure aggregated across open orders and trades for a Risk Protection Group to a specified maximum value), order rate and duplicate order checks, daily price limits, trade risk metrics (which include trading collars and self-trade protections), and order cancellation capabilities. Stress testing, another tool employed by MIAx Futures, measures the Exchange's ability to cover a Clearing Member's potential obligations that may arise from the default or insolvency of the Clearing Member or its customers and thus helps control credit risk. For more information on stress testing, see *Key Considerations 5 and 6*. The Exchange further controls credit risk by using the Fedwire Funds Service, which is a gross settlement system that enables participants to initiate fund transfers that are immediate, final, and irrevocable once processed. The finality of settlement is also clearly stated in MIAx Futures Rules, which provide that the settlement of a payment is final and irrevocable at the point that it is effected. As noted above, price limits and positions limits or accountability levels are another method MIAx Futures employs to reduce credit exposure in the event of a volatile market. These limits, established in MIAx Futures Rules, are based on CFTC requirements and control the risks associated with each of the contracts traded by capping the price movements on a daily basis and the number of positions a market participant may hold in a month or a contract.

The tools described above all stem from the Exchange's risk management framework established by the Board in MIAx Futures Rules. Such Rules include, but are not limited to, those dealing with margin and variation (Rule 2106.00.), security deposits (Rule 2105.00.), deadlines (Resolution 2101.00.C.), price limits, and position limits or accountability levels.

Risk-Management of Settlement Banks:

In addition to the tools used to measure and control credit risk arising from Clearing Members, MIAx Futures employs certain tools and procedures to control exposures resulting from the potential insolvency of a settlement bank. First, settlement banks must be approved by the Exchange pursuant to Rule 2101.00., which provides that Clearing Members must maintain an account at a MIAx Futures approved settlement bank.

Second, MIAx Futures monitors approved settlement banks on an ongoing basis by performing financial reviews that evaluate, among other items, a bank's capital resources and liquidity. Evaluations of all

settlement banks also include reviewing each bank's audited financial statement and published credit ratings, as well as assessing the results from stress tests performed by the bank and by the Federal Reserve. In addition, the Fedwire Funds Service helps control credit exposures from settlement banks by limiting MIAX Futures' exposure time and ensuring timely and accurate transfers of funds.

MIAX Futures measures the effectiveness of the tools discussed in the above paragraphs through the methodologies described in *Key Considerations 4, 5, and 6*.

Key Consideration 3: *A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.*

PFMI #4

Key Consideration 3 is not applicable to the Exchange because MIAX Futures is not a payment system or SSS.

Key Consideration 4: *A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.*

PFMI #4

MIAX Futures maintains robust systems and risk management techniques designed to ensure that the Exchange maintains sufficient financial resources to cover its current and potential future exposures to each Clearing Member with a high degree of confidence. As a part of its risk management framework, MIAX Futures requires that a performance bond, or margin, be collected as a guarantee of financial performance for open positions. Margin levels, as determined by MIAX Futures, are established to cover

99% of the expected price movement for a given product within a given historical period, providing further qualitative and quantitative considerations based on market risk.

To calculate performance bond requirements, MIAX Futures utilizes CME SPAN®, the Standard Portfolio Analysis of Risk methodology developed by the CME ("SPAN"). SPAN bases performance bond requirements on the overall risk of the portfolios, using parameters determined by MIAX Futures. MIAX Futures publishes these risk parameters, giving end users the ability to replicate margin computations.

To estimate parameters and inputs of its margin models, MIAX Futures performs backtesting and its sensitivity analysis. As explained in Principle 6, the Exchange uses its sensitivity analysis to determine potential future margin shortcomings under existing margin methodologies and coverage under extreme but plausible scenarios. Backtesting ensures that margins for MIAX Futures products have been set at an appropriate level. Additionally, MIAX Futures reviews daily fluctuations as they compare to the established margin requirement over the same period of time. Under the current methodology, the Exchange considers any new and unexpected market moves when estimating future volatility as they become a part of the relevant historical data used to determine current volatilities.

As noted above, a key input of SPAN is individual contract margin requirements, which MIAX Futures determines through its margin setting methodologies. The Exchange generally computes commodity specific coverage levels based upon historical price movements, national spot index values, implied volatilities, volume and open interest levels, and other market price fluctuations, while also reviewing a broad set of general market fundamentals each day. MIAX Futures uses statistical modeling methods and other non-price based relationships to estimate future volatility and makes any margin adjustments based on these anticipated volatilities. The Exchange considers various time periods to cover 99 percent of expected price changes for a given product within a given historical period, providing further quantitative and qualitative considerations based on market risk.

SPAN simulates the effects of changing market conditions and uses tailored options pricing models to determine a portfolio's overall risk. It treats all products uniformly while recognizing the unique features of options. MIAX Futures constructs scenarios of price and volatility changes to simulate what the entire portfolio might reasonably lose over a specified time horizon. The Exchange then uses the worst-case loss in the preceding scenario as the SPAN requirement. Since MIAX Futures requires that options purchased must be paid in full, the value of those options is added as portfolio equity. Conversely, the value of options sold is added to the SPAN requirement. The resulting summation becomes the final performance bond requirement for the portfolio.

SPAN evaluates overall portfolio risk at both the clearing and customer level by calculating the worst possible loss that a portfolio could reasonably incur over a specified time period (typically one trading day). This calculation is done by computing the gains and losses that the portfolio would incur under different market conditions. SPAN methodology is based on a set of numeric values that indicate how a contract will gain or lose value under various conditions. Each condition is referred to as a risk scenario, and the

numeric value for each risk scenario represents the gain or loss that a particular contract will experience for a particular combination of price change, volatility change, and decrease in time to expiration. MIAx Futures has configured various parameters within SPAN, customized to the products that are cleared by MIAx Futures. The futures scan range equates to the current outright futures margin requirement set by the Exchange that is calculated and reviewed on a daily basis. The volatility scan range is the maximum change reasonably likely to occur for the volatility of each option's underlying price; the Exchange calculates and reviews volatility routinely and more often during periods of high volatility. Additionally, MIAx Futures has established a short option minimum, which is the assigned minimum value for deep out-of-the-money short option positions charged to a portfolio.

In addition to the performance bonds MIAx Futures requires, the Exchange maintains additional financial resources designed to manage losses in the event of a Clearing Member default or insolvency. Clearing Members are required to pledge additional financial resources through the use of security deposits, providing additional safety and increased liquidity to cover their current and potential future exposures in the event of a Clearing Member's default or insolvency.

In addition to margin and security deposits, the Exchange maintains other financial resources to cover a wide range of potential stress scenarios, including the default by the two Clearing Members that would create the largest combined loss to MIAx Futures in extreme but plausible market conditions. The Clearing House maintains a Clearing House Reserve, MIAx Futures' Skin in the Game, that could be used in the event of a Clearing Member default or insolvency. Additionally, MIAx Futures' working capital, a portion of which has been earmarked by the Board for such purposes, could be drawn upon as an additional financial resource beyond margin, security deposits, and the Clearing House Reserve Fund previously described. .

Although the Exchange is not systemically important in multiple jurisdictions, it nevertheless maintains financial resources that would be sufficient to enable it to cover a wide range of potential stress scenarios including the default by the two Clearing Members that would potentially cause the largest aggregate credit exposure in extreme but plausible market conditions.

All collateral is composed of U.S. dollars and short-term U.S. Treasury Bills. As described in Principle 5, the Exchange does not currently accept any other types of collateral, and MIAx Futures takes a haircut to mitigate the risk associated with the slight fluctuations in non-cash collateral. Given the nature of these financial resources, they are readily accessible and extremely liquid. Additionally, the Exchange has secured committed lines of credit that are readily available and could provide further liquidity if needed, as discussed in Principle 7.

MIAx Futures evaluates the sufficiency of all of its financial resources on a daily basis through stress testing, which is described under *Key Consideration 5*, and at any other time deemed prudent to ensure that the Exchange could cover the default by the two Clearing Members creating the largest aggregate credit exposure.

The framework established by the Board, which includes Rules governing items such as margin, variation, security deposits, and default funding, as well as CFTC requirements regulating areas including stress testing and minimum liquidity resources, set in place governance arrangements relating to the Exchange's total financial resources. Additional information concerning the policies and procedures described in the preceding paragraphs are noted on the MIAX Futures Website for the public's use through summaries and in this disclosure. The Exchange developed such policies and procedures based on the products it clears, CFTC regulatory requirements, best practices, and other relevant information. The rationale supporting MIAX Futures' holdings of total financial resources is further discussed in *Key Considerations 5 and 6*, and for more information on governance arrangements, please refer to Principle 2.

Key Consideration 5: *A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.*

PFMI #4

As an important part of MIAX Futures' financial safeguards, MIAX Futures conducts daily stress testing of its Clearing Member accounts. These stress tests aim to evaluate the impact of each Clearing Member's portfolios from a variety of extreme but plausible market scenarios. The MIAX Futures Risk Team evaluates hypothetical exposures created from these exercises to ensure that the available financial resources are sufficient to cover the exposure of the Clearing Member that poses the largest net liquidity obligation. This assessment allows MIAX Futures to evaluate a worst-case scenario and ensure that sufficient financial resources are available to cover its largest potential default in extreme but plausible market conditions.

These scenarios ensure compliance with heightened risk management standards created by the CFTC and are completed and reviewed on a daily basis by the MIAX Futures Risk Team. Furthermore, MIAX Futures shares portions of these results with the Board Risk Committee to ensure the risk management framework is being maintained and is robust enough to cover such scenarios. The reporting of stress test results to the Risk Committee is summarized in a way that allows MIAX Futures to balance effective governance arrangements and risk management with confidentiality considerations.

Members of the Risk Team conduct stress tests and review the results on a daily basis. By evaluating the exposures calculated under various stressed metrics, MIAX Futures is able to determine the adequacy of total financial resources available. In the event that stress results are approaching current thresholds, MIAX Futures takes immediate corrective action to adjust the resources accordingly, which may include increases in margin, security deposits, the Clearing House guaranty fund, or other funding sources. Various summary analyses may be shared with other executive management members, the Risk Committee, or the Board.

The Risk Team assesses the effectiveness and appropriateness of the stress test assumptions and parameters on a daily basis by determining whether financial resources are sufficient to cover potential exposures based on appropriate stress testing. Stress testing is designed to account for numerous conditions across extreme but plausible scenarios, and the robustness of the model captures and accounts for shifts in market volatility. By monitoring the various parameters and assumptions of the stress testing models, including historical data from relevant peak history, the Risk Team adapts the model to fit a range of conditions over different time horizons.

An independent consultant validates the risk management model, and its underlying assumptions, on an annual basis. In an effort to provide a safe marketplace, MIAX Futures utilizes the latest programs and advanced modeling techniques generally accepted by the futures industry.

Key Consideration 6: *In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include 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.*

PFMI #4

As described under the Key Considerations above, MIAX Futures considers a multitude of scenarios when conducting stress testing of financial resources to identify exposures under extreme but plausible market conditions. To address risks related to position and price volatility, MIAX Futures uses peak price volatilities. Other scenarios take into account various conditions and factors.

Key Consideration 7: *An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial*

resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

PFMI #4

The Exchange has established explicit rules and procedures that fully address potential credit losses resulting from a participant default, including how uncovered credit losses would be allocated, in its Rules and in its recovery and wind-down plan, which is approved by the Risk Committee. The recovery and wind-down plan and MIAX Futures Rules also address how financial resources would be replenished.

Allocation of Credit Losses:

In recognition that the default of a single or multiple Clearing Members or the failure of a settlement bank could result in a credit loss, MIAX Futures Rules contain procedures that address potential credit losses to the Exchange following the default or defaults of participants, including how uncovered credit losses would be allocated. Specifically, the default of one or more participants would result in the activation of the Exchange's standard default procedures, which are set forth in Chapter 21 of the MIAX Futures Rulebook. Pursuant to MIAX Futures Rules, security deposits of other non-defaulting Clearing Members would only be applied after exhausting the excess funds (including any partial payment amounts or settlement variation gains), security deposits, margins and performance bonds, and other assets of the defaulting Clearing Member; payments made by a guarantor of the defaulting Clearing Member; and assets of the Clearing House reserve fund.

In the event that all of these resources prove inadequate and MIAX Futures has exhausted the default "waterfall" set forth in MIAX Futures Rules, the Exchange could utilize the recovery procedures described in its recovery and wind-down plan to allocate the uncovered credit loss. The tools available to MIAX Futures in recovery and wind-down are set forth in Chapter 21 of the MIAX Futures Rules to make the process transparent to Clearing Members. For example, MIAX Futures has the power to levy an assessment against Clearing Members (excluding any insolvent or defaulting Clearing Members) and may also levy an assessment against all Members. In addition, the Exchange may seek voluntary contributions from Clearing Members and Market Participants. If despite these measures MIAX Futures is still unable to cover its obligations or has insufficient funds to satisfy its losses, the Clearing House may conduct a haircut settlement cycle. During a haircut settlement cycle, if the net portfolio gains of non-defaulting Clearing Members for both proprietary and customer positions in MIAX Futures contracts ("Clearing Member Collects") exceed all available funds, including payments made by Clearing Members due to net portfolio losses, then the Clearing House will haircut the amount of Clearing Member Collects on a pro rata basis based on the amount of available funds received relative to the Clearing Member Collects and pay such Clearing Member Collects. Lastly, MIAX Futures has the ability to conduct a partial tear-up or full tear-up of contracts if necessary.

Replenishment of Financial Resources:

Following a stress event, Rule 2109.05. requires a Clearing Member to replenish any deficiency in financial resources resulting from MIAX Futures applying all or part of such security deposits to meet the Exchange's obligations within two hours of receiving notice of such deficiency.

PRINCIPLE #5: COLLATERAL

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Key Consideration 1: *An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.*

In accordance with Rule 2106.00., which was approved by the MIAX Futures Board of Directors and certified by the CFTC, MIAX Futures currently accepts collateral in the form of cash and short-term U.S. Treasury Bills. At present, no currency other than the U.S. Dollar (USD) is allowed, and Treasury Bills must generally mature within twelve months. The list of acceptable collateral is periodically reviewed by the MIAX Futures Risk Team to ensure that the Exchange accepts assets with low volatility and high liquidity. The Exchange also evaluates how easily the market value for the asset is determined and does not accept collateral that may provide wrong-way risk to the Exchange. No exceptions currently exist for which MIAX Futures would allow Clearing Members to pledge other types of collateral.

Key Consideration 2: *An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.*

PFMI #5

MIAX Futures has established prudent valuation and haircut practices commensurate to the assets that it accepts as collateral. As the market value of non-cash collateral fluctuates, MIAX Futures evaluates and determines an appropriate haircut for this collateral. Due to the stable nature and quality of U.S. cash and short-term Treasury Bills, the Exchange marks its collateral to market on a daily basis.

MIAX Futures reviews the sufficiency of its established haircuts on a monthly basis. During this review, the Exchange considers various periods of historical stressed market conditions. Additionally, the Exchange reviews published credit ratings for the non-cash collateral that it accepts in determining applicable haircuts.

Key Consideration 3: *In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.*

PFMI #5

Due to the types of non-cash collateral that the Exchange accepts, procyclical adjustments are currently not a major concern to MIAX Futures. Since MIAX Futures only accepts two types of collateral, cash and Treasury Bills, the need for any procyclical adjustments greatly diminishes. Specifically, as stated in the above paragraphs, the Exchange only accepts short-term Treasury Bills, and as a result, the established haircut provides a conservative safe-guard against a deterioration of market value during potential stressed market conditions.

Key Consideration 4: *An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.*

PFMI #5

MIAX Futures avoids holding assets that could significantly impair its ability to liquidate such collateral quickly without adverse price effects. The U.S. Treasury market is recognized globally for its reliable liquidity, even during times of stress. Treasury Bills are extremely marketable and liquid assets. MIAX Futures consequently does not currently impose any concentration limits on pledged collateral due to the high quality and liquidity of the assets it accepts as collateral.

Key Consideration 5: *An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.*

PFMI #5

MIAX Futures does not currently accept any forms of cross-border collateral, and the risks related to foreign collateral are therefore inapplicable to the Exchange.

Key Consideration 6: *An FMI should use a collateral management system that is well-designed and operationally flexible.*

PFMI #5

MIAX Futures' collateral management system features several different components. First, the Clearing House maintains various systems responsible for the calculation of required margin and variation, the management of collateral posted, and other relevant information for each Clearing Member by customer and house account.

A second primary feature of MIAX Futures' overall collateral management system is the safekeeping of Treasury Bills. Specifically, Clearing Members deposit Treasuries used as collateral into MIAX Futures owned accounts, meaning the Exchange has the power to liquidate the Treasury Bills if needed.

Conversely, pledged cash is accounted for and managed differently within MIAX Futures' s collateral management system than non-cash collateral. Clearing Members must wire the cash via Fedwire services

directly to the Exchange where the funds are held in segregated accounts in accordance with CFTC and MIAX Futures requirements. MIAX Futures always has real-time access to cash balances and performs reconciliations to verify that all pledged activity ties between its collateral management system, internal MIAX Futures accounting system, and the bank's accounts twice each day. MIAX Futures' settlement banks also send MIAX Futures monthly statements, which the Exchange uses to perform additional monthly reconciliations.

MIAX Futures maintains a robust collateral management system designed to calculate margin requirements, variation calls, and produce and disseminate various reports in an accurate and timely manner. MIAX Futures' updated and improved its collateral management system as a part of its overall clearing system development and upgrade work in 2025. The collateral management system is now fully integrated with the clearing system, which provides more streamlined functionality. These systems are adequate for its collateral management processes and remain in compliance with CFTC regulations, MIAX Futures Rules, and other applicable requirements. If changes should be required, however, the Exchange would work with its Clearing Members and settlement banks to effect such changes in the ongoing monitoring and management of collateral. Otherwise, the Clearing House has developed a timely and accurate system to determine margin required and variation requirements on a daily basis for any positions taken by market participants. MIAX Futures staffs the collateral management system daily, and all members of the Clearing House are trained to perform the daily duties in order to ensure smooth operations at all times.

PRINCIPLE #6: MARGIN

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

Key Consideration 1: *A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.*

MIAX Futures' margin methodology is a focused piece of the Exchange's overall risk management framework, as approved by the MIAX Futures Board of Directors. This framework, as outlined within MIAX Futures Rules, has been approved by the CFTC. The specific processes for determining effective margin rates charged by MIAX Futures are documented within internal policies and procedures with a general overview and current margin rates located on the MIAX Futures Website.

MIAX Futures Rules authorize MIAX Futures to collect margin from Clearing Members for the purpose of protecting the Exchange against potential losses and reducing the credit exposure borne by MIAX Futures. The Exchange calculates these requirements at the portfolio level for each Clearing Member by Regular (House) and Segregated (Customer) designations. Utilizing the CME SPAN® ("SPAN") margining

methodology, MIAX Futures calculates Clearing Member required margin on a daily basis, based on the open positions the Clearing Member maintains in each portfolio.

SPAN is a sophisticated methodology that calculates performance bond requirements, or margin, by analyzing the “what-ifs” of virtually any market scenario. MIAX Futures utilizes a number of different market scenarios when calculating margin requirements. Each scenario represents a contract’s hypothetical gain/loss under a specific set of market conditions from a set point in time to a specific point in time in the future. Every scenario is comprised of a different market simulation moving the underlying price up or down and/or moving volatility up or down.

MIAX Futures publishes the results of these scenarios within its SPAN parameter file, which is made available to the public. This file is updated daily and contains the latest contract settlements, required margin levels, and risk scenario arrays, which is available to market participants for use in their individual risk management efforts. Additionally, MIAX Futures publishes its current margin levels on its Website. The MIAX Futures SPAN parameter file can be found on CME’s Website.

Margin levels for each contract vary from one another due to their unique trading and underlying contract characteristics. MIAX Futures may establish and adjust margin levels based on a variety of factors, however, the analysis of statistically expected future price movements based on relevant historical changes in price is at the core of the margin setting model. Margin levels for futures and options on futures are established to cover at least 99 percent of expected price changes for a given product within a given historical period. In addition to using the statistical modeling methods previously described, MIAX Futures considers other non-price based relationships to estimate future volatility. For example, the Risk Team uses information such as the United States Department of Agriculture (“USDA”) crop reports, planting and harvesting data, yield reports, weather conditions, disease concerns, stocks of grain, overall market supply and demand, and other relevant information to gauge future market volatility and formulate appropriate margin levels. Clearing Member portfolio margin requirements are calculated by the Clearing House on a daily basis. MIAX Futures utilizes the Customer Gross Margin methodology as required by the CFTC for all customer segregated portfolios. MIAX Futures’ margin methodology aids in providing a reliable market place. Due to ever changing market factors and conditions, the MIAX Futures Risk Team continually monitors and evaluates the adequacy of established margin levels. As a part of this analysis, MIAX Futures performs rigorous backtesting and a margin sensitivity analysis to ensure that the Exchange’s margin requirements match the risks associated with each contract traded.

A failure in a Clearing Member’s responsibility for payment, whether due to financial or operational issues, is addressed in MIAX Futures Rules. Any shortage or failure of payment by the established deadlines constitutes a default and triggers MIAX Futures’ default management Rules.

As established in its Rules, MIAX Futures mitigates its potential credit exposure arising from a lack of payment by a Clearing Member through the use of security deposits. These Clearing Member security deposits are available to the Clearing House for such an event and would be used to satisfy any

uncollected credit exposure. Additionally, MIAX Futures maintains committed lines of credit and may draw on the line for liquidity needs resulting from such exposures. MIAX Futures liquidity resources are discussed in more detail in Principle 7.

To reduce the operational and timing risks associated with margin collections and payments, MIAX Futures has established deadlines for receipt of payment, which have been codified in the MIAX Futures Rulebook and are enforceable through a schedule of summary fines issued for late payments. Repeated violations will be escalated to the Disciplinary Committee for further fines and/or actions as required above those that are called for under MIAX Futures summary fines.

Key Consideration 2: *A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.*

PFMI #6

MIAX Futures relies upon relevant historical price data within its margin setting methodologies. Margin models are updated with accurate price information derived directly from Exchange settlement and data systems and do not rely upon third party data providers for any data on MIAX Futures traded contracts. Consequently, this data is directly-sourced, immediately available, and accurate. Additionally, relying on MIAX Futures systems for price data prevents the Exchange from using estimated prices in any of its models.

Key Consideration 3: *A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.*

PFMI #6

In accordance with the MIAX Futures risk management framework, established in the MIAX Futures Rulebook, MIAX Futures requires that market participants deposit and maintain initial and maintenance margin as protection against losses. MIAX Futures has established margin models, which have been developed to identify and maintain appropriate margin requirements. In an effort to maintain appropriate

and meaningful margin requirements, MIAX Futures evaluates its margin levels on a daily basis. Specifically, MIAX Futures' margin levels are set using a methodology that is designed to meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. Due to relevant market variables not addressed within the statistical models, other outside assessments may be made from time to time as deemed necessary to determine appropriate performance bond levels.

On a daily basis, MIAX Futures measures the volatility of each contract and spreadable relationship by calculating various statistical confidence intervals, constructing confidence levels at 99% and higher, based on relevant historical time horizons. Applying varying time horizons to the confidence interval models allows for the identification of volatility trends over time. Each confidence interval is calculated on an individual contract basis, with a focus on the first two to three nearby contract months listed. In each case, the calculated confidence interval represents a statistical likelihood that a contract's daily fluctuation would be at or below the calculated confidence level value on a given day, based on relevant historical data. This analysis is used as a consistent benchmark in evaluating margin levels.

While performing its analysis for HRSW futures, the MIAX Futures Risk Team gathers and compiles futures price information on other similar wheat contracts, which have historically shown a strong correlation to MIAX Futures markets. The MIAX Futures Risk Team analyzes daily fluctuations of these contracts using similar statistical models previously described. Each of these calculated values aid in providing a high level overview of market volatility across the wheat futures complex and at times may aid in predicting future volatility that has yet to appear in MIAX Futures products. Furthermore, on a daily basis, MIAX Futures reviews implied volatilities for MIAX Futures products as well as CBOT and KCBT wheat products. Statistical confidence intervals are calculated and are monitored for significant deviations from the established margin benchmark. These implied volatility valuations are reviewed by the MIAX Futures Risk Team in an effort to aid in predicting future increases or decreases in market volatility, but are not used as overriding factors in determining the appropriateness of a margin increase or decrease.

The use of statistical confidence intervals are an important method employed to measure volatility, however, the results of such tests are limited to observed historical data used within the model. Consequently, MIAX Futures considers other non-price based relationships to estimate future volatility. For example, the Risk Team uses information such as USDA crop reports, planting and harvesting data, yield reports, weather conditions, disease concerns, stocks of grain, overall market supply and demand, and other relevant information to gauge future market volatility and formulate appropriate margin levels. Many of the key parameters of the margin model, including the confidence interval and time horizon utilized in the interval testing have been identified through the margin backtesting process that it conducts (see *Key Consideration 6*). MIAX Futures utilizes a variety of historical time horizons and confidence levels when analyzing its margin levels. These varying time horizons provide the MIAX Futures Risk Team the opportunity to identify potential trends in volatility changes. The varying time horizons and confidence levels, which are used within its margin methodology, have been established through MIAX Futures'

backtesting process, which allows the evaluation of theoretical time horizons and confidence levels with historical price fluctuation.

As a part of MIAX Futures' mission, the Exchange works to provide a fair and reliable marketplace. As such, in the event that MIAX Futures would be required to liquidate a defaulting Clearing Member's positions, MIAX Futures would employ a liquidation strategy that would aim to liquidate the positions in a way that would be least disruptive to the market. As a result, MIAX Futures may attempt to employ various hedging techniques to limit the exposure of non-liquidated positions.

For MIAX Futures' products that are based on underlying agricultural commodities, the Exchange has not identified any procyclicality related concerns since such contracts are independent of compounding risks that may be associated with various financial products. Although prices of MIAX Futures products may be affected by various economic factors, MIAX Futures captures these changes when measuring changes in volatility trends and no wrong-way risk exists. All products are based on underlying agricultural commodities, independent of compounding risks that may be associated with various financial products.

Key Consideration 4: *A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.*

PFMI #6

As an important part of MIAX Futures' risk mitigating techniques, the Exchange utilizes a mark-to-market process designed to periodically remove accumulated debt obligations among market participants. As a general standard, MIAX Futures marks-to-market all Clearing Member positions at least twice a day, once during its intra-day variation cycle and once at its end-of-day settlement cycle. During each of these time periods, MIAX Futures determines the change in market value of all open futures positions; MIAX Futures calculates accumulated variation based on the most recent and relevant market data. Immediate payment is required from Clearing Members whose positions have lost value since the previous variation cycle. Subsequently, MIAX Futures makes payments to those Clearing Members whose positions have gained value. Additionally, option premiums (cost of the option) are also collected from the buyer by MIAX Futures on that day that the option traded.

MIAX Futures closely monitors the uncollected exposure from changes in market price and has implemented a deadline schedule to ensure prompt payment from its Clearing Members. Since MIAX Futures' variation cycles are a significant tool used to minimize market exposure, timely payment is essential. MIAX Futures Resolution 2101.00.C., included in the Rulebook, identifies payment deadlines for both the intraday and end-of-day variation cycles.

While MIAX Futures routinely conducts intraday variation calls, initial margin calls (as defined by the CFTC) are conducted once a day. However, MIAX Futures has the authority, per MIAX Futures Rule 2106.00.,

and operational capacity to make initial margin calls more frequently, and will make calls for additional initial margin outside of its normal processes as necessary.

Key Consideration 5: *In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorized to offer cross-margining, they must have appropriate safeguards and harmonized overall risk-management systems.*

PFMI #6

The Exchange offers spread credits to portfolios that carry positions in various product combinations that are found to be highly correlated with one another. These credits are available at both the customer and clearing level at a rate determined by the Exchange. These spread credits are identified within the MIAX Futures SPAN parameter file, which is created and utilized by MIAX Futures for the purpose of calculating margin requirements. While product combinations for which MIAX Futures has allowed margin offsets have a long history of past correlation, MIAX Futures routinely tests the relationship between these products to ensure the appropriateness of the defined spread credit.

Additionally, MIAX Futures offers spread credits between MIAX Futures products and select highly correlated products cleared by other clearing houses. Correlation between products where MIAX Futures has allowed offsets is routinely determined to ensure the appropriateness of the spread credit. MIAX Futures identifies its potential future exposure at the product level, and subsequently at the portfolio level through its margin analysis and subsequent SPAN analysis of its portfolios previously described in *Key Considerations 1* and *3*. MIAX Futures does not currently participate in any cross-margining arrangements with any other CCPs.

Key Consideration 6: *A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily backtesting and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.*

PFMI #6

MIAX Futures conducts rigorous backtesting of the margin setting methodology that it employs. On a daily basis, MIAX Futures evaluates the sufficiency of the margin levels in effect by comparing each margin level, both outright and spread margins for all MIAX Futures traded contracts, with the respective daily price movement for each contract or calendar spread. MIAX Futures does not currently have any cross-

margin relationships with other CCPs, and as such, MIAX Futures' backtesting data consists of MIAX Futures products.

Per CFTC regulation, MIAX Futures' margin model requires that the actual coverage of the initial margin requirements produced by MIAX Futures' margin models, along with the projected measures of the model's performance, meet a confidence level of at least 99 percent, based on data from an appropriate historical timeframe. As such, MIAX Futures performs its backtesting process to ensure that it remains in compliance with CFTC rules.

MIAX Futures also conducts a sensitivity analysis on its margin model. On a daily basis, MIAX Futures recalculates its commodity-specific margin rates by adjusting the actual price changes used within MIAX Futures margin models to reflect the current potential market move based on statistical confidence intervals using price data from relevant peak history or a single day market limit move. MIAX Futures' margin models primarily use confidence intervals with various historic time horizons of up to one year to capture and develop extreme but plausible market moves, as well as relevant historical peak volatilities. Specifically, MIAX Futures margin models and the margin levels charged are reviewed on a daily basis by the Risk Team. By supplementing these hypothetical moves to its margin models, MIAX Futures is able to determine the effect such moves may have on the actual commodity-specific margin levels calculated within the margin models.

MIAX Futures utilizes the construction of statistical confidence intervals within its margin setting model. As such, MIAX Futures recognizes that these statistical models rely on historical data in order to project future outcomes. As a result, unexpected market volatility may not be fully captured by the historical data used within the model.

MIAX Futures reviews its margin models on a daily basis through its backtesting process and engages a third party to review the model and its assumptions at least annually. As discussed within Principle 2, changes to the risk management framework are incorporated through changes to the MIAX Futures Rulebook, with Board and CFTC approval.

MIAX Futures discloses its backtesting results within its Quantitative Disclosures for CCPs. Margin performance is also disclosed to the CFTC.

Key Consideration 7: *A CCP should regularly review and validate its margin system.*

PFMI #6

Through its backtesting procedures, MIAX Futures is constantly reviewing the effectiveness of its margin process to ensure that the Exchange maintains robust and relevant systems to mitigate credit exposure from market fluctuations. This review method is publicly disclosed within *Key Consideration 6* of Principle 6. Additionally, MIAX Futures engages an independent consultant to review and validate MIAX Futures'

margin methodology. This review is conducted to further verify the appropriateness of MIAX Futures' margin process.

MIAX Futures' Risk Framework, which is established by the Board, allows the Risk Team to make revisions and adjustments to its margin methodology as needed. However, MIAX Futures discloses the summary results of the independent analysis to its Board Risk Committee upon completion.

PRINCIPLE #7: LIQUIDITY RISK

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain 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 should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Key Consideration 1: *An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.*

MIAX Futures' risk management framework is designed to manage the liquidity risks posed by various entities to MIAX Futures. Liquidity risks posed by Clearing Members are addressed through the collection of margin and the posting of security deposits. On a daily basis, MIAX Futures calculates performance bond requirements for all of its Clearing Member portfolios and requires that Clearing Members post funds to the Clearing House to cover its margin requirement. Additionally, Clearing Members are required to post security deposits as additional funds for the safe operation of the Clearing House. In the event that a Clearing Member becomes illiquid and cannot meet its obligations (i.e., variation margin, additional initial margin requirements, etc.), these resources are available to MIAX Futures to use in satisfying its obligations to other market participants.

MIAX Futures also manages its liquidity risks from its various settlement banks, custodian banks, and liquidity providers. In order to transact business with MIAX Futures or to pledge collateral, as appropriate, to satisfy its obligations to MIAX Futures, each Clearing Member must utilize a MIAX Futures approved settlement/custodian bank. MIAX Futures has developed criteria that settlement and custodian banks must meet to be utilized by MIAX Futures and its Clearing Members as a settlement/custodian bank. Reviews of these banks are conducted at least annually and include a financial review of the financial institution's audited financial statements. Additionally, MIAX Futures conducts similar financial reviews for financial institutions involved with providing liquidity through lines of credit.

As required by CFTC Regulations, MIAX Futures must maintain sufficient liquid resources that, at a minimum, will enable MIAX Futures to meet its intraday, same-day, and multiday obligations to perform settlements with a high degree of confidence under a wide range of stress scenarios that should include, but not be limited to, a default by the clearing member creating the largest aggregate liquidity obligation for the DCO in extreme but plausible market conditions. As such, MIAX Futures conducts stress testing to determine the size of its liquidity needs.

MIAX Futures conducts all business in U.S. denominated currency, as evidenced by MIAX Futures contract specifications (such specifications are available on MIAX Futures' Website), as well as effects all settlements in U.S. denominated currency. Consequently, all liquidity resources are maintained in U.S. dollar denominations.

MIAX Futures evaluates the inter-linkages between its Clearing Members and the various roles that they may play at or for MIAX Futures. Currently, MIAX Futures has noted linkages resulting from Clearing Members that are also MIAX Futures-approved settlement banks. However, the entities are subject to Clearing Member and settlement bank reviews, which are conducted to provide a basis for each entity's financial stability.

Key Consideration 2: *An FMI should have 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.*

PFMI #7

MIAX Futures maintains systems to track and monitor the flow of funds conducted through its intraday and end-of-day settlement system. This data is used by MIAX Futures' Market Regulation department to conduct various daily financial analyses. Additionally, the Exchange utilizes various reconciliation processes to identify and track cash flow and fund balances, which are used when constructing various liquidity stress tests.

Key consideration 3: *A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.*

PFMI #7

Not applicable to CCPs.

Key Consideration 4: *A CCP should maintain 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 that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.*

PFMI #7

MIAX Futures holds sufficient liquid resources to meet its payment obligations in the event of a default of the participant and its affiliates that would generate the largest aggregate payment obligations in extreme but plausible market conditions. The use of a “cover one” liquidity risk scenario is consistent with both PFMI standards as well as CFTC regulations. The Exchange has not been designated as a CCP systemically important in multiple jurisdictions.

MIAX Futures conducts its stress testing on a daily basis and as a result, the required resources that must be maintained constantly fluctuates. More information on the liquid resources maintained by MIAX Futures can be found in the MIAX Futures Public Quantitative Disclosure, which is available on its Website. MIAX Futures conducts all business in U.S. denominated currency and as such, assets held as collateral are U.S. based.

Key Consideration 5: *For the purpose of meeting its minimum liquid resource requirement, an FMI’s 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. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.*

PFMI #7

As noted in *Key Consideration 4*, MIAX Futures conducts all business in U.S. denominated currency. Consequently, MIAX Futures maintains all of its liquid resources in U.S. denomination. The combined total liquid resources (the cash portion of security deposits, MIAX Futures Guaranty Fund contribution or skin in the game, MIAX Futures working capital, committed lines of credit, and the cash portion of applicable Clearing Member performance bonds) sufficiently cover the minimum liquidity resource requirement to effect settlement of payment obligations on time.

MIAX Futures does not have access to credit at the Federal Reserve and thus relies on the funding sources previously disclosed.

Key Consideration 6: *An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are 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. Even if an FMI does not have access to routine central bank credit, it should still take 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. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.*

PFMI #7

Due to the limited asset types that MIAX Futures accepts as collateral, MIAX Futures does not need to use supplemental liquid resources.

Key Consideration 7: *An FMI should obtain 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, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.*

PFMI #7

As previously explained in Key Consideration 1, MIAX Futures regularly conducts Settlement Bank and Liquidity provider reviews to ensure appropriate management of liquidity risk and the capacity to perform as required. MIAX Futures has developed criteria that settlement bank/custodians and liquidity providers must meet and include a review of the financial institution's audited financial statements among other metrics. Additionally, MIAX Futures ensures similar reviews are performed for financial institutions involved with providing liquidity through lines of credit.

MIAX Futures has established and committed lines of credit with Wells Fargo Bank, NA and BMO Harris. MIAX Futures has entered into formal agreements with its liquidity providers to provide committed lines of credit to the Exchange, and based on the size of MIAX Futures' committed lines of credit and the review of its liquidity providers, MIAX Futures is confident its access to liquidity is reliable. However, to help ensure the timeliness and reliability of its procedures for accessing liquid resources at MIAX Futures' liquidity provider, the Exchange routinely tests its access on a quarterly basis. Each test involves MIAX Futures drawing on the line and verifying timely receipt of funds.

Key Consideration 8: *An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.*

PFMI #7

MIAX Futures does not have legal access to central bank accounts and as such, cannot implement services that the utilization of central bank services may provide.

Key Consideration 9: *An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include 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. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.*

PFMI #7

MIAX Futures conducts stress tests on a daily basis to determine the required liquid resources that must be maintained per CFTC Regulations. These stress tests are performed and reviewed by members of the MIAX Futures Risk Team. The MIAX Futures Risk Team, upon evaluation of the stress test results and the sufficiency of liquid resources, determines whether or not an adjustment to the size of the Exchange's liquidity pool is necessary.

As required by CFTC Regulation 39.33, MIAX Futures conducts stress tests using a variety of scenarios. These scenarios utilize relevant peak historic price volatilities, multiple defaults over various time horizons, simultaneous pressures in funding, and asset markets and a variety of forward-looking stress scenarios in extreme but plausible market conditions.

MIAX Futures utilizes a real-time gross payment system (FedWire Funds Service) and as a result, mitigates its liquidity risk by requiring prompt and immediate payment by its Clearing Members for variation and initial margin payments.

MIAX Futures' stress test scenarios are designed to capture the nature and size of the liquidity needs from a default by the Clearing Member that creates the largest aggregate liquidity obligation for the DCO in extreme but plausible market conditions. MIAX Futures reviews its stress testing analysis for effectiveness and appropriateness on a daily basis. As part of this analysis, MIAX Futures performs a type of reverse

stress testing. MIAX Futures evaluates each Clearing Member's positions by relevant portfolio to determine a fluctuation value at which MIAX Futures' prefunded financial resources would be exhausted. This analysis is then used to determine whether or not the liquidity stress testing parameters and assumptions used are appropriate in light of current and evolving market conditions.

CFTC Regulation § 39.36(e) requires that MIAX Futures perform, on an annual basis, a full validation of its financial risk management model and its liquidity risk management model. In conformity to this regulation, MIAX Futures has engaged a third-party expert to validate its financial risk management model and its liquidity risk management model on an annual basis.

The results of these daily stress tests provide support for the rationale for the amount and form of its total liquid resources. MIAX Futures adheres to minimum liquidity standards and as such, MIAX Futures maintains sufficient liquid resources to cover these minimums. Summaries of stress tests are provided to the Board Risk Committee, which provides further governance over the sufficiency of its total liquid resources.

Key Consideration 10: *An FMI should establish explicit rules and procedures that enable the FMI 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. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI'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.*

PFMI #7

Per the deadline schedule established in MIAX Futures Resolution 2101.00.C., MIAX Futures will continue to effect its payment obligations on time following any individual or combined default among its participants, provided there are no liquidity shortfalls as a result of the default. However, in recognition that the default of a single or multiple Clearing Members or the failure of a settlement bank could result in an uncovered liquidity shortfall, MIAX Futures has the authority to take certain actions to address such liquidity shortfall in accordance with its Rulebook and recovery and wind-down plan. For example, the Exchange has multiple lines of credit that would be available during a liquidity crisis, and the MIAX Futures Risk Team may borrow or draw on such funds as necessary. In addition, MIAX Futures Rules allow the Clearing House to obtain additional liquidity to meet its payment obligations through various means, including substituting cash deposited by Clearing Members in a guaranty fund or as a performance bond for U.S. Treasuries deposited by another Clearing Member that has caused a liquidity shortfall. The Risk Team also may elect to have the Exchange require each Clearing Member that is a U.S. Government Securities Broker-Dealer or has U.S. Government Securities Broker-Dealer affiliate to enter into (or arrange for such affiliate to enter into) a master repurchase agreement with MIAX Futures. In the event that a liquidity shortfall remains even after utilizing the methods described above and in the Rules, the

Exchange has the power to levy an assessment against Clearing Members (excluding any insolvent or defaulting Clearing Members), subject to the maximum obligation cap set forth in the Rules. Additional tools that MIAX Futures would employ during recovery are described within this disclosure.

The Exchange also maintains procedures to replenish any liquidity resources employed during a stress event. MIAX Futures has established Rules that require, should it become necessary, a Clearing Member to immediately make good on any deficiencies in security deposits by established deadlines for the current end-of-day cycle. As a result, security deposits used to cover liquidity shortfalls may be restored on the same day as a stress event depending on when the liquidity shortfall occurred.

PRINCIPLE #8: SETTLEMENT FINALITY

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Key Consideration 1: *An FMI's rules and procedures should clearly define the point at which settlement is final.*

In accordance with MIAX Futures Rule 2107.00., the settlement of a payment is final and irrevocable at the point that it is effected. MIAX Futures uses the Fedwire Funds Service for all cash transactions, and this settlement system enables participants to execute fund transfers that are immediate, final, and irrevocable once processed. The MIAX Futures Rulebook, which is publicly disclosed on the Exchange's Website, defines and documents settlement finality.

Within the legal framework established by the Board and certified by the CFTC, MIAX Futures Rule 2109.02. further provides that if a Clearing Member fails to promptly discharge any obligation to the Exchange, including settlement payments or transfers, MIAX Futures may apply such Clearing Member's collateral or other assets to discharge the obligation. In order to ensure timely payments, MIAX Futures adopted a schedule of deadlines that require settlement and margin payments to be made by 9:00 a.m. and intra-day variation payments by 11:30 a.m. These deadlines, which are set forth in Resolution 2101.00.C. of the Exchange's publicly available Rulebook, are enforced through summary fines that may be imposed on late payments or other disciplinary action. These summary fines are also publicly disclosed on the MIAX Futures Website.

MIAX Futures uses its Rulebook to ensure that settlement finality will be achieved in all relevant jurisdictions with a high degree of legal certainty. Because the Exchange is registered with the CFTC and is subject to its ongoing oversight, MIAX Futures has the specific authority to act as a DCO and DCM and exercise its powers as such. Such powers include implementing Rules that, after approval by the Board of Directors, are submitted to and certified by the CFTC to ensure that they meet and are consistent with

relevant laws and regulations. As discussed above, MIAX Futures Rules describe settlement finality and provide that any person or entity that initiates or executes a transaction consents to the jurisdiction of the Exchange and agrees to be bound by and comply with all MIAX Futures Rules and procedures. By requiring that all Rules be approved by the CFTC and making all market participants subject to the jurisdiction of the Exchange, MIAX Futures is able to demonstrate with a high degree of legal certainty that settlement finality will be achieved in all relevant jurisdictions through the enforceability of its Rulebook.

Key Consideration 2: *An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.*

PFMI #8

In accordance with its Rules, MIAX Futures' final settlement process is complete on the value date. The Exchange ensures that final settlement occurs no later than the intended value date through the framework established by the Board in the MIAX Futures Rulebook, including the specific deadlines and fines noted under *Key Consideration 1*. In addition, the Exchange's default procedures set forth in Chapter 21 of the Rulebook are triggered if a settlement obligation is not promptly discharged. Pursuant to the MIAX Futures Rulebook, deferrals of final settlement to a later business day are not acceptable, and to date, no such deferrals have ever occurred.

MIAX Futures marks positions to market twice a day, once at intra-day and again for final settlements. For real-time settlement during the intra-day period, open futures positions are marked to market. Once calculated, the Clearing House communicates transfer instructions for pays and collects via email. The Clearing House then initiates wire transfers for the variation amounts from Clearing Members, monitors incoming payment obligations, and contacts firms if necessary to ensure the receipt of funds by the 11:30 a.m. deadline. MIAX Futures determines final settlement amounts in a similar fashion, but calculates variation and margin requirements for both futures and options. Funds for final settlement and margin payment are due by 9:00 a.m. the following business day. MIAX Futures does not use multiple-batch processing methods for settlement.

Key Consideration 3: *An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.*

PFMI #8

MIAX Futures Rules define the point at which unsettled payments, transfer instructions, or other obligations may not be revoked by making payments and transfers final and unconditional once effected. Since such payments are final and unconditional, they may not be unilaterally revoked. In addition, given the manner in which transactions are made through the Fedwire Funds Service, transfers cannot be revoked once processed regardless of the circumstances. Should the Clearing House determine that an error occurred

in a funds transfer, it will initiate another wire transfer to correct such error. MIAX Futures does not make any revocation exceptions or extensions.

All settlement and revocation information described in the paragraphs above is set forth in the MIAX Futures Rulebook, which is disclosed to the general public on the Exchange's Website.

PRINCIPLE #9: MONEY SETTLEMENTS

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Key Consideration 1: *An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.*

MIAX Futures conducts money settlements using commercial bank money denominated in U.S. Dollars. MIAX Futures does not conduct settlements in any other currencies. The Exchange does not use central bank money because as a Subpart C DCO, it does not currently have access to Federal Reserve Banks or their services.

Key Consideration 2: *If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.*

PFMI #9

As noted under *Key Consideration 1*, the Exchange conducts its money settlements using commercial bank money as it is an asset with little credit or liquidity risk. To monitor and mitigate possible credit and liquidity risks associated with using commercial banks for settlement purposes, MIAX Futures has established risk management policies and procedures. As discussed in Principle 4, and pursuant to MIAX Futures Rule 2101.00., settlement banks must be approved by the Exchange. This approval process involves evaluating specific criteria, including the size of the bank (assets must meet a minimum threshold), the results of Federal Reserve stress tests, and the investment grade credit status of the bank. In order to receive approval, the bank must also be a member of the Federal Reserve, be regulated by an appropriate governmental agency, and have the capability to send and receive wire transfers during set hours and provide real-time payment processing for fund transfers.

Key Consideration 3: *If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should*

establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.

PFMI #9

After a bank is approved under the process described in *Key Consideration 2*, MIAX Futures continues to monitor, manage, and limit its credit and liquidity risks arising from commercial settlement banks by performing annual reviews of such banks. These reviews assess, among other items, a bank's capital resources and liquidity, compliance with applicable regulations, credit rating, and stress test results. The MIAX Futures Risk Team also analyzes any material changes that may have occurred since the last review to ensure the financial soundness and the operational efficiency of the bank. This approval process and the ongoing risk management procedures ensure that the commercial banks used are well capitalized and have access to liquidity, thus minimizing the risk they pose to the Exchange.

MIAX Futures further limits its credit exposures and liquidity pressures by diversifying such risks through the use of multiple commercial banks. Clearing Member funds, for example, are maintained at a different bank than MIAX Futures funds are held. Moreover, the Exchange maintains the funds it holds at large commercial banks where its assets comprise only a fraction of a percent of the bank's total liquidity, thereby further attempting to alleviate any liquidity risk.

Key Consideration 4: *If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.*

PFMI #9

The Exchange does not conduct money settlements on its own books.

Key Consideration 5: *An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.*

PFMI #9

All settlement transfers are deemed final and irrevocable pursuant to MIAX Futures Rule 2107.00., which specifically states that all payments of funds or transfer of funds to and from MIAX Futures are final and unconditional when effected and cannot be reversed. In addition, MIAX Futures utilizes the Fedwire Funds Service, which enables participants to execute fund transfers that are immediate, final, and irrevocable. Funds are transferred twice each day, at intra-day and end-of-day settlements, in accordance with MIAX Futures Rules and Resolutions.

PRINCIPLE #10: PHYSICAL DELIVERIES

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Key Consideration 1: *An FMI's rules should clearly state its obligations with respect to the delivery process of physical instruments or commodities.*

The Exchange lists and clears trades associated with commodity futures and options contracts. Currently, only HRSW futures contracts may be settled through physical delivery in accordance with the terms and conditions and contract specifications outlined in the MIAX Futures Rules. In other words, market participants have the opportunity to make or take delivery of the specified commodity as a means of offsetting outstanding long or short open futures contracts during the delivery month. During the delivery month, position holders can be matched and transfer ownership of the physical HRSW in accordance with all applicable Rules. The remaining contracts are all financially settled in U.S. Dollars.

MIAX Futures defines its obligations and responsibilities with respect to delivery in its Rules, which are certified by the CFTC, and disclosed to the public on the Exchange's Website. Such Rules are publicly available on MIAX Futures' Website, but to summarize, if a seller gives a Delivery Notice to the Clearing House, then the Clearing House is responsible for passing such notice to the buyer. The buyer is determined by finding the oldest long futures position holder based upon Exchange records and MIAX Futures staff assigning delivery of the underlying commodity to these long position holders. Once matched, MIAX Futures issues a Report of Deliveries notifying both parties as well as the general public that a physical delivery will be occurring. The Clearing House calculates the amount to be paid for the commodity being delivered by taking into account the number of bushels delivered, the contract price for such commodity for the day on which delivery is being made, the premium or discount (if any) for the grade delivered, and the amount of storage and insurance charges. After the buyer pays the seller, the seller releases the warehouse receipts to the buyer. Upon taking possession of the warehouse receipt(s), the buyer becomes the rightful owner to the product in store and assumes responsibility for all storage and insurance charges from that point forward. Physical delivery is made by submitting these warehouse receipts to a Regular elevator or warehouse, at which point the elevator or warehouse must deliver the product identified and described on the warehouse receipt under the terms and conditions specified within the MIAX Futures Rulebook.

The Exchange ensures that its participants understand their obligations and the procedures for effecting physical delivery through its publicly available Rulebook. In addition, MIAX Futures posts delivery manuals, reports, notices, lists of Regular facilities, and other information on its Website where it is easily accessible to the public. Collectively, these Rules, procedures, and information allow MIAX Futures to

communicate participants' obligations in a clear and transparent fashion, thereby ensuring that such participants understand their responsibilities.

The procedures and requirements noted herein are stated in MIAX Futures Rules and contract specifications, which are located on the Exchange's Website.

Key Consideration 2: *An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.*

PFMI #10

The Exchange recognizes that certain risks are associated with the storage and delivery of physical products, including the risk of theft, loss, or the deterioration of assets. MIAX Futures has implemented Rules, as well as various procedures and controls to monitor and manage risks and costs associated with storage and delivery. The Exchange manages these risks by, among other procedures, establishing policies that ensure MIAX Futures' record of physical assets reflects the actual holdings, provide specifications for acceptable commodities, state rules for warehouse operations and minimum financial and insurance requirements, and govern the timing of delivery. In addition, the USDA is responsible for the inspection and audit of the facilities involved with HRSW physical delivery and also oversees general cash market activities of the products. As a result, MIAX Futures relies upon the USDA for its regulatory oversight and supervision requirements in addition to MIAX Futures requirements as it relates to performing physical delivery.

In order to monitor various aspects of HRSW delivery, Regular warehouses and elevators must submit Stocks of Grain reports on a weekly basis. These reports state the facility's inventory of the deliverable product and are posted on MIAX Futures' public Website. MIAX Futures' Market Regulation Department compares stocks reports to open positions reports and through this process, analyzes the availability of deliverable grade HRSW in relation to open positions to ensure fair and equitable trade practices occur in the corresponding futures contract. Furthermore, the Market Regulation Department monitors price relationships between these futures contracts and other similar futures products in an effort to ensure markets are not being manipulated in any way. This review includes monitoring convergence, which is the ability over time for cash and futures prices to move and come together at the expiration of the futures contract, to ensure the contracts involved with physical delivery are behaving as sound risk management tools for market participants and are free from manipulation. Moreover, as a contract month approaches its delivery and expiration period, Market Regulation will begin performing heightened surveillance involving the futures contract by closely monitoring price movements, open interest, and position holders. During this time, Market Regulation determines which accounts are holding positions in the delivery month and then contacts Clearing Members that hold positions on behalf of customers to ascertain their customer's intentions for the upcoming delivery period. Market Regulation may also contact the customers directly if needed, particularly as the last day of trading approaches. Doing so aids in knowing the identity of the market participants for a contract month going through delivery and allows Market Regulation direct

access to the customers involved. By understanding a customer's intentions and obligations, Market Regulation can better ensure a smooth delivery process free of manipulation.

Other MIAX Futures Rules and procedures for HRSW delivery require that elevators and warehouses be properly equipped for convenient and expeditious receiving, handling, and shipping of bulk commodities to be approved for and maintain their status as a Regular facility. Furthermore, Regular facilities must meet minimum financial requirements, which they demonstrate by submitting audited financial statements each year to MIAX Futures and inform the Exchange of any adverse change in status or financial conditions. In addition to imposing financial requirements on Regular facilities, MIAX Futures requires elevators and warehouses to maintain insurance in their own name for the account of warehouse receipt holders for the full market value of the commodity represented by warehouse receipts delivered on futures contracts. This coverage is needed until the time the commodity is actually loaded out of the warehouse and thus helps control risks associated with the storage of HRSW. Finally, all facilities Regular for delivery in HRSW must be licensed by the USDA.

Any changes to the delivery process as described above would first be vetted by the Hard Red Spring Wheat Committee, which is composed of Board Members and market participants. Any topics concerning contract terms and conditions or contract specifications may be discussed and voted on by such committee. The Hard Red Spring Wheat Committee may review, for example, storage rates, acceptable vomitoxin levels, delivery locations, and convergence. After the committee meeting, if there is a formal change and corresponding recommendation to be made to the full Board or Directors, the item will be added as a discussion topic for the next Board meeting. Following the necessary governance approvals, it will be submitted to the CFTC for final approval. Once MIAX Futures receives final approval, the changes or additions to the Rulebook are implemented and announced to the public.

MIAX Futures is currently in the process of changing the delivery process described above to use shipping certificates instead of warehouse receipts. This change will be vetted, approved, and made public pursuant to the process described above.

Matching of Participants for HRSW:

MIAX Futures matches participants for delivery and receipt as described in the following paragraphs. The Board established this framework in accordance with USDA requirements, and clearly discloses this process to participants.

The Exchange utilizes a random process for matching participants to ensure the process does not favor either the deliverer or the taker of any warehouse receipts during the delivery process. Specifically, each side of the market—the short (deliverer) and the long (taker)—have separate queues which are established by the Clearing House prior to making assignments. Each distinct phase of this process is explained in greater detail below.

- 1) Short Queue (Deliverer):** All of a single business day's delivery intentions (receipts) received by the deadline by the Clearing House are randomly queued by delivering warehouse. This is referred

to as the short queue.

- 2) **Long Queue (Taker):** The oldest long is determined and assigned receipts from the above short queue until all open positions for the oldest long are filled or receipts in the short queue are exhausted. Should there be additional receipts remaining in the short queue after this step, the process continues to the next oldest long and so on, until all receipts from the above short queue are exhausted.
- 3) **Multiple Takers:** If during this process, there are two or more takers who share the same oldest long date, then each individual taker is randomly chosen and queued in order (first, second, third, etc.), and a long queue is established. Receipts are assigned from the short queue until the first taker's total open positions are filled completely, prior to moving to the next taker in the long queue. This process continues until all receipts are exhausted or until all position holders who share the same oldest long date from the long queue have no remaining open positions. Should receipts still remain, the Clearing House selects the next oldest long date and repeats the above process (including the development of a new long queue, if necessary), until all receipts have been assigned.

By ensuring randomness in the establishment of each side of the market prior to making a single assignment, MIAx Futures believes the delivery process guarantees neither the long nor short is favored in the process at any time.

The MIAx Futures Rules that govern the regularity and delivery process, along with the USDA requirements, help ensure that participants have the necessary systems and resources in place to be able to fulfill their delivery obligations. As discussed above, in order to be approved as "Regular," a facility must be properly equipped for receiving, handling, and shipping of bulk commodities and be capable of loading-out by rail and barge. Other MIAx Futures Rules address whether a facility has met the minimum load-out requirements and who is responsible for any additional costs or damages. In addition, the Market Regulation Department closely monitors open interest and available deliverable supplies, as well as deliveries made, as part of its surveillance program. When a delivery period approaches, Market Regulation uses several reports to monitor the market for signs of imbalance, disorder, and/or manipulation. Market Regulation also focuses on large concentrations of positions and failures to liquidate or roll over positions in an expiring contract as the first notice day nears and contacts Clearing Members and customers as noted above.

PRINCIPLE #12: EXCHANGE-OF-VALUE SETTLEMENT SYSTEMS

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

Key consideration 1: *An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.*

No transactions made on the Exchange may be settled through the linking of two obligations, and Principle 12 is thus not applicable to MIAX Futures.

PRINCIPLE #13: PARTICIPANT-DEFAULT RULES AND PROCEDURES

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Key Consideration 1: *An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.*

The Board of Directors of the Exchange has established a framework governing participant defaults in the MIAX Futures Rules, which have been approved by the CFTC. Such Rules, along with relevant definitions and procedures, allow the Exchange to take timely action and meet its obligations in the event of a Clearing Member default. They also address the rights of MIAX Futures following a Clearing Member Default. A Clearing Member Default is defined in Chapter 1 as the failure of a Clearing Member to meet any of its obligations to or the requirements of the Exchange. Chapter 1 also sets forth definitions for Clearing Member Insolvency and Good Standing. MIAX Futures' default procedures are included in Chapter 21; such procedures both allow MIAX Futures to take necessary action to contain losses and liquidity pressures and make Clearing Members aware of their obligations.

In general, when a Clearing Member is in default they are also deemed insolvent, and vice versa⁴ pursuant to the MIAX Futures Rulebook. In addition to Clearing Member default and insolvency provisions, the Exchange may utilize its financial emergency powers should it identify or anticipate a Clearing Member financial default situation. Specifically, Rule 2109.00. gives the Exchange the authority to use discretion in taking action to protect MIAX Futures and its market participants when it believes one of its Clearing Members may be facing a financial emergency. Such action could include suspending or restricting a Clearing Member's clearing privileges, requesting additional capital, or taking any other actions the

⁴ For purposes of this analysis, references to a Clearing Member default situation also encompass Clearing Member insolvency situations.

Exchange deems prudent to protect its interests and the interests of third parties. Because financial emergencies encompass a range of possibilities, MIAX Futures can invoke this power for various financial situations to enable it to take protective actions sooner to avoid repercussions that a full default situation may present. This authority is also reflected in Rule 2100.03., which allows MIAX Futures to develop and implement risk control policies for customer and proprietary transactions and take actions to manage risk posed by a Clearing Member, including imposing enhanced capital and/or margin requirements, prohibiting an increase or requiring a reduction of positions, and liquidating or transferring positions.

The Rules above address what actions MIAX Futures may take when a default situation occurs and aid in protecting stakeholders of the Exchange. Rule 2109.02., in particular, states that if a default occurs, the Exchange may, in its discretion, apply a Clearing Member's available assets to discharge its outstanding obligations, make immediate demand upon any guarantor of the Clearing Member, and transfer all customer positions and associated collateral to alternate Clearing Members. Pursuant to its Rules, specifically Rule 2117.00, MIAX Futures may rely upon customer gross margin files to ascertain the amount of a customer's pledged margin, and all transfers must be made in accordance with MIAX Futures Rule 3.1.4. In addition to these discretionary actions, the clearing privileges of any defaulting Clearing Member are automatically suspended pending resolution of the default and related matters. While the default situation is ongoing, the Exchange is under no obligation to forward any variation pays or settlement funds to the defaulting Clearing Member.

To further aid the Exchange when addressing a Clearing Member default, MIAX Futures maintains an internal Default Management Plan ("DMP"). The DMP delineates the roles and responsibilities of the MIAX Futures Board of Directors, Board Risk Committee, Chief Risk Officer, MIAX Futures Risk Team, MIAX Futures legal department, other DCOs and exchanges, and federal regulators at various stages of a default.

MIAX Futures' Rules, specifically Rule 2109.03., set forth the priority order in which funds from various sources would be applied to discharge a defaulting Clearing Member's outstanding obligations. MIAX Futures has established a default waterfall for the MIAX Futures products it clears. The default waterfall is sized to ensure MIAX Futures has sufficient resources to cover the potential exposures of a clearing member default, and each firm is required to contribute a security deposit. In a Clearing Member default, MIAX Futures will first utilize any excess funds of the defaulting Clearing Member (including any partial payment amounts, settlement funds, or variation gains) and the Clearing Member's own assets held by the Exchange, followed by the Exchange's own reserve fund, and only lastly accessing non-defaulting Clearing Members' funds. Furthermore, the MIAX Futures Board has earmarked additional Exchange funds that would be utilized if necessary. Unless a default occurs in a customer account, MIAX Futures would not use customer funds or margins to discharge the defaulting Clearing Member's obligations (see below for additional detail).

In accordance with Rule 2110.00., Clearing Members may also be required to pay assessments in proportion to their total security deposit requirements in the event funds in the MIAX Futures default

waterfall were insufficient to cover any loss. The total amount of assessments that a Clearing Member may be required to pay is limited to two and a half (2.5) times of such Clearing Member's total security deposit requirement at the time of a single Clearing Member default, and five and a half (5.5) times of such Clearing Member's security deposit requirement with respect to losses attributable to multiple Clearing Member defaults during a period of time as defined by Rule 2113.00.

Pursuant to Rule 2109.05., in the circumstance that all or part of a Clearing Member's security deposits or margins and performance bonds are applied to meet obligations, the Clearing Member shall immediately replenish any such deficiency in security deposits or margins and performance bonds by wire or other acceptable methods within the deadlines defined by the Rule.

In the unlikely event that a default should exceed MIAX Futures' available financial resources, the Exchange has developed a recovery and wind-down plan that sets forth the procedures it would follow to address such uncovered credit loss or liquidity shortfall. Additional tools are available to MIAX Futures following the initiation of its recovery plan, including Clearing Member assessments, seeking voluntary contributions, variation margin gains haircutting, and the tear-up of contracts. For more information, please refer to the discussion in Principles 4 and 7.

Following the resolution of a Clearing Member Default and the application of various funds to do so, MIAX Futures has the right to recover any funds that were deemed a loss to the Exchange. Pursuant to its Rules, the defaulting Clearing Member shall replenish its security deposits and otherwise remain liable for any loss suffered by the Exchange.

Key Consideration 2: *An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.*

PFMI #13

As discussed above, MIAX Futures Rules and the DMP delineate the roles and responsibilities of various parties for addressing a default. There are several key players that would play important roles in the events following a default. Internally, the key players include the MIAX Futures Risk Team and legal department, President, Chief Risk Officer, Chief Compliance Officer, the Board Risk Committee, the Board of Directors, and other employees of the Clearing House. There are also several external key players that would be involved, such as National Futures Association in its role as DSRO, other DCOs, regulators, and the bankruptcy court appointed trustees. The DMP provides the Exchange with guidance as to the timing of various actions including the involvement of said outside parties, notice to market participants, and notice to the CFTC as the federal regulator. MIAX Futures has the ability to directly communicate with relevant stakeholders either by phone, email, or electronic posting. In terms of notification to market participants, the Exchange can post information directly to its public Website and disseminate directed memos and advisory notices to its Clearing Members and other interested parties. Notice to the CFTC would be given in accordance with applicable requirements, which generally involves electronic notice

followed by additional communication. In a situation where a defaulting Clearing Member is also a member of other DCOs, the CFTC would likely be part of any group meetings or conference calls.

The MIAX Futures Rules, which establish the participant-default framework, are reviewed and updated as necessary or appropriate. All such changes must be internally approved and submitted to the CFTC before becoming effective. Internal policies and procedures are similarly reviewed and updated as needed.

MIAX Futures periodically reviews and tests applicable sections of the DMP, including but not limited to, communication sequence with relevant key players, default auctions, and short-term financing from MIAX Futures' lines of credit. These tests, in conjunction with the DMP, help ensure MIAX Futures is well prepared to implement default rules and procedures in the event of a Clearing Member default.

Key Consideration 3: *An FMI should publicly disclose key aspects of its default rules and procedures.*

PFMI #13

MIAX Futures publishes its entire Rulebook, which contains the default Rules, on its public Website. The Exchange also posts memos, announcements, and alerts that have been provided to Clearing Members, market participants, and other outside parties on the Website, as well as news releases. In addition, the Website provides an archive of MIAX Futures news releases so the public can retain access to both old and new information and data. MIAX Futures also maintains a Risk Management Committee and Risk Advisory Working Group, both of which consist of Clearing Members and customers of Clearing Members that receive updates and proposed rule amendments relating to the Exchange's default rules and procedures. See Principle 2 for more information.

The MIAX Futures Rulebook provides both notice to the public and the necessary guidance to the Risk Team and other internal contacts when determining what circumstances require action and what form of action is permitted and appropriate. To discharge an obligation, any excess funds or available margin involved with the defaulting positions would be utilized followed by the security deposits of the defaulting Clearing Member. Any other held funds or assets of the defaulting Clearing Member would then be used to address any remaining obligations. If there still remained an obligation, and as noted above, the Exchange would utilize monies from its own Clearing House Reserve Fund. Should those funds be exhausted, and obligations still remain, the Exchange would use the security deposits of non-defaulting Clearing Members. The security deposits of non-defaulting Clearing Members would be utilized as a last resort, as well as surplus funds of the Exchange. MIAX Futures will not apply any collateral held in segregated customer accounts to any payment obligations arising from a default in a Clearing Member's proprietary account. Finally, should a default exceed MIAX Futures' available financial resources, the Exchange has developed a recovery and wind-down plan that sets forth the procedures it would follow to address such uncovered credit loss or liquidity shortfall. The key aspects of this plan—the actions the Exchange may take during recovery and wind-down that involve Clearing Members—are set forth in MIAX Futures' Rulebook, which is publicly disclosed.

While assessing the outstanding obligations owed to MIAX Futures on the part of the defaulting Clearing Member, the Exchange would also be working to address the defaulting Clearing Members' customer positions and associated collateral. MIAX Futures does not have a direct relationship with the customers of a Clearing Member and would thus act to transfer all customer positions and associated collateral to alternate Clearing Members. However, if a customer account is in default, then the Exchange has the right to liquidate and apply toward the default all open positions and customer performance bond deposits in the segregated customer account of the defaulting Clearing Member. Pursuant to CFTC requirements and MIAX Futures Rules, all funds deposited with the Exchange on behalf of customers of a Clearing Member are held in a separate account labeled as customer segregated.

Key Consideration 4: *An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.*

PFMI #13

On an annual basis, MIAX Futures conducts a default drill. Clearing Members and market participants (when appropriate) participate in these drills. The Exchange uses the drills to test certain aspects of MIAX Futures' default procedures, such as the auction process, thereby allowing Clearing Members and market participants the opportunity to become familiar with the procedures and test their ability to evaluate and bid on a hypothetical portfolio. The portfolio, as designed by MIAX Futures, is representative of actual risks.

In addition to default drills, MIAX Futures also engages in regular testing of its multiple lines of credit by imposing a hypothetical default scenario which necessitates a drawdown or pledging of collateral for short-term financing from the lines of credit. The Exchange performs such tests quarterly to ensure prompt receipt of the funds.

PRINCIPLE #14: SEGREGATION AND PORTABILITY

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

Key Consideration 1: *A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral*

against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.

As discussed in Principle 13, in the event of a Clearing Member's default or insolvency, customer funds or margins may not be used to discharge a default in a Clearing Member's proprietary account. MIAX Futures Rules further require that funds deposited with the Exchange on behalf of a Clearing Member's customers be held in accounts identifiable as customer segregated in accordance with the CEA and CFTC Regulation 1.20, as amended. Pursuant to MIAX Futures Rule 3.1.4., the Exchange allows the transfer of a customer's positions and related collateral from one Clearing Member's account to another Clearing Member provided that certain conditions are met and the receiving Clearing Member consented to the transfer. MIAX Futures also has the authority to transfer customer positions and associated collateral from a defaulting Clearing Member's account to alternate Clearing Members. In this case, absent additional information, the Exchange would rely upon customer gross margin files to determine the amount of a customer's pledged margin associated with open positions to be transferred pursuant to Rule 2117.00.

In addition to the Rules described above, MIAX Futures also protects customers from the default(s) of participants or a fellow customer by imposing minimum financial requirements and enforcing the same through financial surveillance. MIAX Futures Rules require FCMs, Guaranteed Introducing Brokers, and Clearing Members to meet minimum financial and reporting requirements that are set forth in CFTC regulations. Market Regulation and members of the Risk Team review financial information and statements of these FCMs, Guaranteed Introducing Brokers, and Clearing Members to ensure that they are meeting the minimum requirements. MIAX Futures also relies on each FCM's designated self-regulatory organization as a valuable source of information as it relates to financial and risk surveillance of FCMs and Clearing Members. While MIAX Futures performs many of its own reviews, MIAX Futures also incorporates information obtained via connections and conversations with each FCM or Clearing Member's DSRO.

MIAX Futures is able to ensure that its arrangements to protect and transfer the positions and collateral of a participant's customers are legally enforceable by including relevant requirements in its Rulebook, which is submitted to the CFTC. In addition, the Exchange is required to have such arrangements in place by law (CFTC regulations). Lastly, such arrangements are practiced by the futures industry as a whole. Although MIAX Futures is recognized as a third-country CCP in the European Union and within the Temporary Recognition Regime of the United Kingdom, as discussed in Principle 1, it remains under the jurisdiction of the CFTC and U.S. laws govern segregation and portability requirements.

Key Consideration 2: *A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.*

PFMI #14

In compliance with CFTC regulations, MIAX Futures holds customer funds in an omnibus account within the Exchange owned accounts for cash and in safekeeping accounts for collateral pledged as securities. In all cases, customer accounts are segregated from a firm's house account, and MIAX Futures maintains records that are provided to Clearing Members which show their margin cash and security contributions. In addition, MIAX Futures Rules allow the Exchange to use and rely upon the customer gross margin files reported daily by Clearing Members to determine the amount of a customer's pledged margin, associated with open positions, held at the Clearing House. MIAX Futures chose to hold collateral in an omnibus account because it is an effective practice for all parties involved by efficiently allowing for the transfer of funds and has been a standard practice within the derivatives industry for many years as it relates to futures and options. MIAX Futures does not list or clear swap contracts as of the date of this disclosure.

MIAX Futures holds collateral for initial margin that supports customers' positions. To ascertain each customer's interest if needed, the Exchange can rely upon a Clearing Member's records/files that it is required to submit to MIAX Futures, as described in the paragraphs above. By requiring Clearing Members to submit these reports and enforcing noncompliance through fines, the Exchange is able to ensure that it has access to required information. MIAX Futures collects customer margin on a gross basis and pursuant to its Rules cannot use customer funds or margin to discharge a Clearing Member's obligations unless the customer is directly involved in the default.

Key Consideration 3: *A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.*

PFMI #14

The CFTC and MIAX Futures maintain rules that govern the portability of customer positions and collateral. In the event of a Clearing Member default, the Exchange has the authority to immediately transfer to alternate Clearing Members all customer positions and associated collateral. MIAX Futures would use customer gross margin files to determine the amount of a customer's pledged margin, associated with open positions, when transferring positions. Prior to making the transfer, the Exchange would need to receive the customer's instruction or approval and the accepting Clearing Member would also need to consent to the transfer (see MIAX Futures Rule 3.1.4.).

Key Consideration 4: *A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.*

PFMI #14

MIAX Futures discloses all aspects of its segregation and portability arrangements in its Rulebook and this disclosure, both of which are publicly available on the MIAX Futures Website. Such disclosure includes Rule 2109.02., which states that customer funds or margins may not be used to discharge a default in a Clearing Member's proprietary account. This protection applies regardless of the type of account used to hold a customer's collateral. Unless a requirement other than those imposed by MIAX Futures and the CFTC applies, there are no constraints that could impair the Exchange's ability to segregate or port the positions and collateral of a participant's customers, provided that such customer is not in default and the accepting Clearing Member consents to the transfer.

PRINCIPLE #15: GENERAL BUSINESS RISK

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Key Consideration 1: *An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.*

MIAX Futures has Rules, policies, and procedures to fully vet all new business or strategy decisions that could involve adverse changes to the Exchange's balance sheet prior to the execution of such items. In all cases, executive management and the Board of Directors discuss various "what if" scenarios and analyze pro forma financial statements in order to consider the worst case expenses the Exchange may face as part of any new business strategy. MIAX Futures closely monitors financial performance to ensure continued operations in all cases. Further, in its administration and operation of the Exchange as a business enterprise, MIAX Futures faces certain general business risks, and the Board of Directors has consequently established a framework for managing such risks. In order to identify business risks within this framework, the Exchange assesses what circumstances could impair MIAX Futures' financial position. Specifically, management analyzes potential internal and external sources or factors that could disrupt the Exchange's ability to achieve its objectives or negatively impact cash flow and capital. Management also evaluates any other events that could trigger unexpected or excessively large expenses, as well as common risks associated with conducting business in the industry.

After identifying key risks, the Exchange assesses the probability of a risk's occurrence and its potential impact on MIAX Futures. Management performs various analyses to evaluate how a specific scenario would affect MIAX Futures' revenue and expenses or how a risk in one area could impact other existing business activities. The Exchange then evaluates possible preventative measures or controls that allow MIAX Futures to avoid or reduce the risk or, if the Exchange must accept such risk, tools to manage or

lessen the financial impact (typically insurance). In all matters, MIAX Futures aims to be proactive rather than reactive in monitoring and managing its business risks.

Furthermore, as required by CFTC regulations, the Exchange maintains and operates an Enterprise Risk Management (“ERM”) program and framework as an added controls system to continuously identify, monitor, and manage a variety of risk facing the Exchange, including business, strategic, and financial risks. MIAX Futures’ ERM program and framework are annually reviewed by the Board Risk Committee, which includes receiving all newly identified risks and updates on previously identified risks. For more information on MIAX Futures’ Enterprise Risk Management program, please see Principle 17.

Key Consideration 2: *An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.*

PFMI #15

MIAX Futures holds liquid net assets that would allow it to continue operations and services as a going concern if it incurs general business losses. Such assets are funded by equity (mainly cash in U.S. Dollars) and are sufficient to support at least six to twelve months of current operating expenses, which could be used to implement and achieve MIAX Futures’ recovery and wind-down plan. As required by CFTC regulations, MIAX Futures maintains liquid assets to cover 6 and 12 months’ worth of expenses and sufficient unencumbered liquid financial assets to implement its recovery and wind-down plan. Further, these assets are distinct from its guaranty funds. At the current time, the Exchange considers six to twelve months to be an appropriate time period to execute its recovery and orderly wind-down plan based upon MIAX Futures’ business risks and because it is the estimated length of time required to fully recover or wind-down MIAX Futures’ operations and services, including selling the building and assets. As a result, MIAX Futures is meeting CFTC requirements as far as maintaining liquid resources for such period.

In order to calculate the amount of net liquid assets required, the Exchange examines historical income and expense information to estimate future revenue and expenses and analyzes how such revenue and operating expenses could change under adverse business scenarios or a large one-time loss. It also takes into consideration the types of actions included in its recovery and wind-down plan. MIAX Futures conducts this analysis on a quarterly basis, as well as at any time a material change to MIAX Futures’ business model or external changes occurs.

Finally, in accordance with CFTC regulations, MIAX Futures submits a quarterly report to the CFTC setting forth its financial and operational resources further assuring that MIAX Futures remains in compliance.

Key Consideration 3: *An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.*

PFMI #15

The Exchange has developed and maintains a plan to achieve a recovery or orderly wind-down of operations, and as described under *Key Consideration 2*, MIAX Futures holds sufficient liquid assets to implement this plan over six to twelve months. As required by CFTC regulations, these assets are separate than those that would be used should the Exchange initiate its recovery or wind-down plan due to a participant default (see Principles 4, 7, and 13 for more information). Additionally, the CFTC reviews and has provided comments on the plan, thereby further ensuring its accuracy and completeness.

Key Consideration 4: *Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.*

PFMI #15

The Exchange's net assets used to cover business risks are composed primarily of cash in U.S. Dollars held in financial institutions approved by the Board. The Exchange evaluates its net assets at least once every fiscal quarter under various scenarios, including the adequacy of the assets in adverse market conditions, to ensure that it can meet its current and projected operating expenses and reports its total financial resources to the CFTC. MIAX Futures also maintains multiple lines of credit, which serve as an additional source of liquidity and can easily be converted into cash at a low cost if required by market conditions. One of these lines is available for general business purposes rather than being tied to a liquidity shortfall.

Key Consideration 5: *An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.*

PFMI #15

MIAX Futures maintains a viable plan to raise additional equity if necessary, as required by CFTC Regulations. This plan, as approved by the MIAX Futures Board of Directors, is to request an equity infusion from its parent, MIH, in the event the Exchange is unable, or virtually unable, to comply with financial resources regulations, as required by the CFTC.

PRINCIPLE #16: CUSTODY AND INVESTMENT RISKS

An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Key Consideration 1: *An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.*

MIAX Futures utilizes a variety of settlement banks to facilitate its settlement process, as well as its cash and collateral management requirements. In an effort to mitigate the credit risks posed to MIAX Futures by the settlement banks it uses, the MIAX Futures Risk Team conducts periodic reviews of its settlement banks, as well as depositories and liquidity providers. Additionally, by requiring that each approved settlement bank utilizes the Fedwire Funds Services for transacting wires to and from MIAX Futures and Clearing Member accounts, MIAX Futures is able to ensure all transactions are final and cannot be reversed without a separate wire transaction. The entire review process, along with applicable Rules previously described in this disclosure, limit the credit risk to MIAX Futures arising from approved settlement banks, depositories, and liquidity providers.

MIAX Futures conducts different reviews on an annual, quarterly, and daily basis. Based on criteria developed by MIAX Futures, part of the annual review of a bank includes analyses of a number of items, including finances and operational capacities. The Exchange also meets with settlement bank contacts and evaluates the following non-exclusive list of criteria when performing a review of a bank:

Settlement Bank / Depository / Liquidity Provider Operational Criteria	
1)	The bank must be a <i>Large U.S. Commercial Bank or Investment Bank</i> and have consolidated assets of \$200 million or more.
2)	Bank should meet investment grade credit status by either Moody's or Standard and Poor's rating service.
3)	Bank should be a member bank of the Federal Reserve.
4)	Bank must be able to send and receive wire transfers during the hours of 7:00AM and 4:30PM CT.
5)	Bank must be able to provide real-time payment processing (no overnight batch processing) for all fund transfers between MIAX Futures and clearing member accounts.
6)	Bank must provide account holders with a list of contacts available for immediate assistance (during normal business hours).
7)	Bank must be regulated by an appropriate governmental agency.
Settlement Bank / Depository / Liquidity Provider Financial Criteria	

1)	If publicly available, the MIAX Futures Financial Surveillance team will review the financial statements for financial condition.
2)	If available, the independent auditor conducting the audit of financial statements may not have noted any material control deficiencies.
3)	If available, the independent auditor conducting the audit of the financial statements may not have issued a going concern opinion.
4)	Determine if the firm is in compliance of minimum capital ratios required to be maintained pursuant to regulations issued by the Federal Reserve, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation.
5)	Determine if any important line item balances have changed significantly (30%) since the previous statement and, if so, consider contacting the firm to ascertain why.
Settlement Bank Criteria	
1)	In determining settlement bank approval, MIAX Futures will consider results of Dodd Frank Act stress testing based on severely adverse scenarios developed by the Federal Reserve.

Key Consideration 2: *An FMI should have prompt access to its assets and the assets provided by participants, when required.*

PFMI #16

Pursuant to the provisions of the CEA and CFTC regulations, MIAX Futures is required to maintain segregated accounts for the exclusive benefit of its customers. In fulfilling this requirement, the Exchange has executed custody agreements, which create a contractual relationship that explains the rights and responsibilities of each party to the agreement. MIAX Futures also maintains accounts for transacting business with the Clearing House and Clearing Members, and these accounts are held in the name of the Exchange. Bank documentation supports the usage of these accounts and ownership of funds in the accounts. In addition, Clearing Members deposit Treasuries used to meet margin requirements into MIAX Futures owned accounts, thereby allowing MIAX Futures the ability to promptly access and liquidate the securities if needed.

The collateral acceptable for meeting MIAX Futures margin requirements are those that the Exchange considers to present the least exposure to credit, liquidity, and market risks. MIAX Futures recognizes only those assets that are readily available to market participants and can be readily converted to cash at a predictable value and timeframe in order to minimize risk during times of market stress.

Key Consideration 3: *An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.*

PFMI #16

As explained above, MIAX Futures conducts reviews of its custodian banks and all settlement banks used by the Exchange. These reviews allow MIAX Futures to verify that the use of any custodian will not expose the Exchange to major concentrations of risk by reviewing the size of assets held in relationship to the amount of collateral being held by the custodian for MIAX Futures purposes.

Key Consideration 4: *An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.*

PFMI #16

CFTC Regulation 1.25 sets forth the instruments and transactions in which MIAX Futures is permitted to invest customer funds. Later amendments adopted by the CFTC further restrict the types of permissible investments under Regulation 1.25 with the overall objective of preserving principal and maintaining liquidity. The Exchange's Investment Policy specifies which investments are acceptable, in accordance with Regulation 1.25. All proposed investment policies undergo an internal review and approval process to ensure the policy is consistent with the overall risk management strategy of the Exchange. MIAX Futures discloses, at the request of the CFTC, all investment strategies. CFTC Regulations only allow for investment in high quality, low risk investment vehicles while limiting the concentration in such investment options. All funds invested by MIAX Futures meet CFTC requirements both in terms of the type of investment as well as concentration limits.

PRINCIPLE #17: OPERATIONAL RISK

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Key Consideration 1: *An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.*

In recognition that the Exchange faces certain operational risks, the Board of Directors has established a framework for addressing such risks. In order to identify risks within this framework, MIAX Futures assesses what internal or external sources could result in the reduction or breakdown of services provided by the Exchange. Specifically, management analyzes potential deficiencies in systems operations or

disruptions from external events by assessing various “what if” scenarios in order to evaluate worst case scenarios. Sources identified include but are not limited to natural disasters, inadequate controls to manage risks, and inadequate screening or training of personnel.

The Exchange monitors and manages operational risks through various methods, which are documented within internal policies and procedures. For example, MIAX Futures manages its risk arising from a natural disaster or any kind of other local disaster by maintaining business continuity and disaster recovery (“BCDR”) plans. These plans include a secondary location that meets the geographical distance requirements imposed by the CFTC, thereby allowing MIAX Futures to resume and continue its operations. MIAX Futures also tests aspects of this plan at least annually to ensure its effectiveness.

In addition, the Exchange operates and maintains an Enterprise Risk Management program and framework to continuously identify, monitor, and manage risks faced by the organization. MIAX Futures developed its ERM framework with consideration of industry best practice and standards, including the COSO ERM Integrated Framework and the ISO 31000 Risk Management Guidelines. Exchange staff representing various areas of the company make up an internal ERM team tasked with identifying, assessing, and mitigating operational risk on an ongoing basis. The Risk Committee receives annual reports on all risks identified and managed by the ERM program, including review and approving any changes made to the ERM policy and framework.

In order to ensure that its employees are well-qualified and capable of efficiently operating the Exchange’s systems, MIAX Futures follows human resources procedures when hiring, training, and retaining personnel. More specifically, the Exchange seeks to hire individuals with relevant education and work backgrounds and individuals go through a training and onboarding process upon the commencement of employment. Annual performance reviews are conducted for all employees in order to address any deficiencies or possible areas for improvement and additional training. Lastly, MIAX Futures maintains fraud prevention policies, which limit who has access to banking arrangements and MIAX Futures Clearing and general banking accounts. These policies also restrict access to certain other systems or locations to prevent theft or fraud.

MIAX Futures’ operational risk management framework also includes change-management processes to mitigate risks arising from changes to operations, policies, procedures, and controls. More specifically, this framework requires changes to go through a process of assessment, approval, and testing prior to implementation.

Key Consideration 2: *An FMI’s board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI’s operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.*

PFMI #17

The Board has delegated overall responsibility for operational risk, including BCDR plans, ERM, and various other operational risks to the President or the CEO, along with executive management. Operational changes and risks are also discussed regularly with the Board Risk Committee. In addition, the Board reviews substantial outstanding debt owed to the Exchange beyond 90 days and the prior quarter's financial results. At each Board meeting, management provides updates to the Board regarding outstanding issues that may affect the Exchange both in the short-term and long-term, and the Board offers management direction on how best to proceed. The Treasurer also gives an update at each Board meeting regarding the overall financial performance of the Exchange, drawing attention to profitability, specific line items that may be over or under budget, and future projections. In addition, on an annual basis, an outside auditor provides an overview of financial results and reports on MIAX Futures internal controls. As of the date of this disclosure, no material concerns have been noted by the Treasurer, the outside auditor, or other MIAX Futures departments.

On an annual basis MIAX Futures participates in the industry-wide Futures Industry Association's DR testing and performs additional internal drills simultaneously. For details concerning the testing that is performed, please refer to the FIA's Website. In preparing and participating in the annual industry test, MIAX Futures routinely monitors connections and attempts to improve processes to ensure robustness in its operations. Specifically, MIAX Futures has primary and secondary Clearing systems located in Secaucus, New Jersey while also ensuring complete redundancy of all Clearing related systems and processes at a secondary facility that can be operationally ready within two hours of a disruption, as explained further in *Key Consideration 6*.

As part of the annual industry wide test, MIAX Futures assumes that all primary and secondary Clearing systems are not available in Secaucus and exclusively utilizes its Chicago, Illinois DR location and systems to complete the test. Additionally, the Exchange issues correspondence to all MIAX Futures Clearing Members that trade MIAX Futures markets to ensure that they are able and ready to fully participate in such tests or face disciplinary action for a lack of participation or completing the test. In performing the tests, all Clearing Members must engage MIAX Futures by entering orders for trade matching and allocation from the DR location, and enter and match ex-pit trades through this system as proof of their ability to conduct business with the MIAX Futures Clearing House should there be a disruption at MIAX Futures' primary site. In addition to ensuring access to MIAX Futures clearing systems, the Exchange also checks to make certain that all Clearing Members have been able to retrieve the test data entered and matched from the DR site into their systems as part of the test. To do so, MIAX Futures confirms that each Clearing Member has logged into all DR systems, the required test data has been entered into these systems, and the final trade and clearing reports have been retrieved from the DR location. Failure to follow these steps and processes would necessitate follow up to ensure connectivity as well as potential disciplinary action by the Clearing House and/or Market Regulation. Finally, following the test, MIAX Futures conducts an internal postmortem of Exchange operations and corrects or improves any noted deficiencies. Once completed, MIAX Futures updates its internal policies and procedures as necessary.

MIAX Futures employs an outside audit team that examines the Exchange's internal control processes and procedures on an annual basis and reports its findings to the Board. The Exchange's finance, legal, and Clearing House departments will at times meet with the outside auditor to provide documents, policies, or procedures in an effort to provide the outside audit team assurance as to the stability of MIAX Futures internal controls, policies, and procedures. This audit occurs on an annual basis with an audited financial statement and notes presented to the Exchange. As its final step, the outside auditor will report all of its findings to the MIAX Futures Board during a subsequent Board meeting. As of the date of this disclosure, no material findings by the outside audit team have been noted in the last year.

Key Consideration 3: *An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.*

PFMI #17

MIAX Futures has developed key operating objectives, which are described within this disclosure, that the Exchange works to maintain on a daily and annual basis. One of the main objectives is to ensure 100% reliability in terms of daily operations and specifically, the MIAX Futures Clearing House. As of the date of this disclosure, MIAX Futures has not had an operational issue which resulted in a material loss of up time. On an annual basis MIAX Futures sets departmental objectives designed to further various operational goals including the reliability requirement.

Key Consideration 4: *An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.*

PFMI #17

MIAX Futures has stress tested its clearing related servers and associated systems to allow for matching of trades at a rate of 7,610 per 5 second intervals. As of March 31, 2025, observed production peaks were 1,902 trades in a 5 second interval. The observed processing rates demonstrate the capability for the system to perform many multiples of the target 500,000 trades per day. As of March 31, 2025, the observed peak trade count for any given day was 38,705 trades. Accordingly, MIAX Futures has the operational capacity to account for an extreme increase in daily trade volume. However, if an instance developed where MIAX Futures volumes increased substantially, the software architecture of the MIAX Futures clearing system leverages the use of parallel processing for all core functions, enabling both vertical and horizontal scaling. Due to the design of MIAX Futures systems, hardware or software can be easily adjusted to add the necessary capacity to avoid a market disruption long before any occurrence would cause a problem with MIAX Futures operations.

Key Consideration 5: *An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.*

PFMI #17

MIAX Futures physically secures its offices and buildings through locks and secure access points. Other than the limited public areas of MIAX Futures' buildings, all space and offices are secured to limit the possibility of unauthorized entry. The Exchange also employs 24x7 security personnel in order to promote a safe and secure environment. In addition, MIAX Futures maintains a camera system which is viewable by building personnel throughout the day and evenings.

As it relates to data and infrastructure, MIAX Futures maintains a closed environment to the outside world by not allowing direct access to any system considered essential. Specifically, the IT Department is responsible for ensuring all servers and personal MIAX Futures-issued computers are updated with security patches and anti-virus software. Furthermore, interaction with the Clearing House from MIAX Futures Clearing Members and outside sources are username and password protected and assigned by

the IT Department. These forward-facing systems are simply available for data entry purposes for trade data by MIAX Futures Clearing Members. Each day the front-end systems are cleared of all data and downloaded into MIAX Futures systems which are accessible only to MIAX Futures employees by secure usernames and passwords. In addition, MIAX Futures maintains business continuity plans for its personnel in the event of a physical disruption in the main offices of MIAX Futures.

Furthermore, MIAX Futures' information security policies that define the standards, procedures, and practices of the Exchange are maintained by a dedicated information security team, including but not limited to, security incident management, enterprise technology risk, vulnerability scanning, and penetration testing. These information security policies are based on national and industry best practices, as well as applicable CFTC regulations, and enable the Exchange to successfully protect the confidentiality, integrity, and availability of information. As such, MIAX Futures believes its systems and design for physical and information security, along with the testing of these systems, conform with national and industry standards and in some cases go beyond industry standards with regard to how mission critical systems are accessed.

Key Consideration 6: *An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.*

PFMI #17

As noted above, MIAX Futures maintains a Clearing DR location designed to be operational within a two-hour recovery time period following a disruption, as required by CFTC regulations. Given MIAX Futures market times, this period would allow MIAX Futures to complete its daily processing, including settlement, by the end of the day of such disruption. All procedures required to effect such a scenario are codified within internal policies. The Exchange's BCDR site is geographically dispersed from its primary location, and MIAX Futures also has personnel that live and work outside of the relevant area. Through this geographic and personnel dispersion, the Exchange is able to ensure that it is capable of meeting the two-hour recovery time objective after an operational interruption or wide-scale disruption.

In addition, MIAX Futures utilizes a system whereby any edits to trade data or allocations of matched trades that have occurred in MIAX Futures production servers are automatically replicated to its offsite BCDR location. Should data be missing, MIAX Futures can retransmit matched trade data for display in its front-end systems for Clearing Member reconciliation purposes. Any allocations or ex-pit type activity which may have been dropped could also be reconciled by Clearing Members and entered into MIAX Futures BCDR systems once operational. After verifications have occurred, MIAX Futures could then continue with final clearing processes.

Key Consideration 7: *An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.*

PFMI #17

MIAX Futures has identified risks associated with its Clearing Members and settlement banks. MIAX Futures has taken the following steps in order to attempt to mitigate these risks.

Clearing Members:

MIAX Futures maintains a strong and effective risk management framework to effectively handle the default or insolvency of one of its Clearing Members. Please refer to other sections of this disclosure for specifics concerning this framework. The Exchange conducts annual required testing for all Clearing Members to ensure Clearing Members can connect and continue operations should MIAX Futures need to fail-over to its DR location.

Settlement Banks:

MIAX Futures maintains an online banking system for transacting business with its Clearing Members through its primary settlement banks. Should the online banking system not be available or fail, MIAX Futures has the ability to directly contact the wire room and enact wire transfers to and from MIAX Futures Clearing Members via phone. Dedicated personnel at MIAX Futures have been granted access to be able to work with the wire room to effect intraday and end of day wire transfers. In addition, by maintaining a relationship with more than one settlement bank, MIAX Futures is able to help mitigate this risk.

Other:

In addition to the above policies and as mentioned previously, MIAX Futures also maintains a Third-Party Risk Management program and a fully redundant DR location that utilizes separate internet, phone, and power suppliers from that of the Exchange's primary location.

In order to mitigate exposures to other FMIs, MIAX Futures maintains a BCDR location that has been designed to continue MIAX Futures operations in case of a widespread power outage located in and around the Exchange's primary location. Operational policies and procedures have been implemented for the purpose of communicating in a situation that would affect the ability to trade MIAX Futures products.

PRINCIPLE #18: ACCESS AND PARTICIPATION REQUIREMENTS

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

Key Consideration 1: *An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.*

Exchange traded futures and options are listed by MIAX Futures and cleared through the Exchange's Clearing House. Any party active in MIAX Futures markets is under the jurisdiction of the Exchange and must comply with the applicable MIAX Futures Rules. MIAX Futures market participants consist of FCMs, Clearing Members, and their customers, who must meet various legal, operational, and financial requirements, which are tailored by their needs and level of participation in the Exchange. In addition to requirements stated in the MIAX Futures Rulebook, participants must meet additional requirements at

each level of participation that are established by various industry organizations, such as the National Futures Association or the CFTC and are described in the paragraphs that follow.

Customer Participant:

For purposes of this Customer Participant section, the market participants described herein are not FCMs or Clearing Members. While clearing membership is not a pre-requisite for participation in the MIAX Futures marketplace, a market participant must, at a minimum, form a relationship with an FCM in order to trade MIAX Futures products that will eventually clear through the MIAX Futures Clearing House. The access requirements for a market participant include the following:

Legal. Pursuant to MIAX Futures Rule 2.1.2., market participants are bound by and must comply with the MIAX Futures Rules in relation to such transactions. If a market participant violates any of the Rules, it is required to cooperate and participate in any investigatory and disciplinary processes initiated by MIAX Futures' Market Regulation Department as a result of the violation. Additional information on Market Regulation's monitoring, investigation, and disciplinary functions are described below in Key Consideration 3.

Operational. All Exchange products trade on the MIAX Futures Onyx Electronic Trading Platform. Market participants may access Onyx directly or indirectly. In order for any market participant to access Onyx indirectly, the market participant must first form a relationship with an FCM who has connectivity to Onyx and either the FCM, firm, or the market participant in question must have a relationship with a MIAX Futures Clearing Member who, along with the Exchange, approves access to the match engine. The market participant agrees to set up an account with the FCM or Clearing Member, fund that account accordingly, and comply with margin requirements and other associated requirements necessary to trade a futures or options contract. The FCM or a third-party vendor provides the market participant with front-end IT capabilities, and the market participant is ultimately certified by Onyx. A market participant who accesses Onyx directly (an "Onyx Direct Access Participant" or "ODAP") must complete an application and certification process with the MIAX Futures Membership and Trading Operations Departments. All ODAP application materials are available on the MIAX Futures Website. If approved by the Exchange, ODAPs may connect directly to Onyx via a cross-connect (instead of through an FCM's interface or an ISV) as permissioned by the Trading Operations department.

MIAX Futures Rules govern the operational access condition and requirements of market participants. The access rules are primarily located in Chapters 2 and 6 of the MIAX Futures Rulebook. The following table outlines the primary rules that apply:

Rule	Description
Rule 2.1.5.	<u>Cooperation with Investigatory and Disciplinary Procedures</u> Requires Market Participants to comply with and provide documentation as requested by the Exchange in any investigations

		or receive disciplinary action up to and including termination of usage and access to the electronic trading system.
Rule 5.17.	<u>Misuse of Electronic Trading System</u>	Provides several examples of what activities constitute “misuse of the electronic trading system” by the Market Participant, all of which are prohibited.
Rule 6.1.	<u>Access to the Electronic Trading System</u>	Provides that market participants may access Onyx directly or indirectly. Additionally, provides that all market participants must be guaranteed by a MIAx Futures Clearing Member.
Rule 6.7.	<u>Onyx Direct Access Participant Application and Criteria</u>	Provides that all market participants seeking a direct connection to Onyx must apply and be approved by the Exchange.
Rule 6.20.	<u>Termination of Electronic Trading System Connection</u>	Grants the Exchange the power to terminate a Market Participant’s access to the electronic trading system.

Financial. The financial requirements for a customer market participant include the ability to open an account with an FCM, fund that account, and ensure that adequate funds are deposited with the FCM, as well as to continue to meet margin calls from the FCM, or their positions may be liquidated. Every market participant must post initial margin at the initiation of a futures transaction as well as maintenance margin during the period a futures contract remains open. Additional information on margin is in the Clearing Member section below.

Non-Clearing Member FCM:

An FCM is an individual or organization that solicits or accepts orders to buy or sell futures contracts, options on futures, or swaps, and accepts money or other assets from customers to support such orders and open positions.

Legal. Generally speaking, the CEA is the applicable federal law and requires that all FCMs register as such to conduct business with the public. In practice, this requirement means all FCMs must register with and be members of NFA in order to conduct futures and options business with the public.

Operational. As stated previously, all MIAx Futures products trade on Onyx. In order for an FCM to access Onyx, it would either establish its own connectivity directly with the Exchange or gain connectivity indirectly through an existing Clearing Member or an ISV. A MIAx Futures Clearing Member must approve the FCM for access to all markets MIAx Futures clears. If the FCM is not a Clearing Member, such FCM would be required to sign a customer agreement and establish an account with an Exchange Clearing Member before they could be provided access and allowed to trade on Onyx. The FCM would then be able to provide its customers with the front-end IT capabilities required for trading with a Clearing Member’s permission. FCMs are responsible for providing an oversight and monitoring function for their customers.

FCMs may also apply and be approved for a direct connection to Onyx as described in the Customer Participant section above.

Financial. FCMs must comply with applicable industry financial requirements, applicable CFTC or other regulations that set forth particular financial requirements, and if registered as a clearing member with MIAX Futures, with applicable MIAX Futures Rules, as detailed below:

Rule	Description
Rule 2.2.2.	<u>Financial and Reporting Requirements</u> The Exchange may establish financial and reporting requirements, provided that requirements for FCMs are established at levels no lower than those required by the CEA and CFTC regulations.
Rule 2.2.5.	<u>Minimum Financial Requirements for Futures Commission Merchants</u> Requires FCMs with customers trading MIAX Futures contracts to meet minimum financial reporting requirements in CFTC Regulations and provide the Exchange with the reports required under the regulations.
Rule 2.2.7.	<u>Notification of Fiscal Year</u> Requires any Person required to provide financial information to the Exchange to notify the Exchange in writing of any change to its fiscal year.
Rule 2.2.8.	<u>Reduction of Capital</u> Requires any Person required to provide financial information to the Exchange to notify the Exchange in writing of any material reduction to its net capital, adjusted net capital, working capital, and/or its net worth.
Rule 2.4.3.	<u>Fees: Exchange Regulatory Fee</u> Provides that the Exchange may assess an exchange regulatory fee or fees.

Clearing Member:

Clearing Members have the right to clear their own trades and FCM Clearing Members have the right to clear their customers' trades through the MIAX Futures Clearing House. Clearing Members protect buyers and sellers from financial loss by assuring performance on each traded contract. Although many different customers trade within the MIAX Futures marketplace, all trades are ultimately cleared by the MIAX Futures Clearing House and MIAX Futures Clearing Members have financial responsibilities for ensuring performance of such cleared trades on behalf of their customers.

Legal. MIAX Futures clearing privileges are governed by the MIAX Futures Rules and more specifically, Chapter 21. When an entity wishes to gain clearing privileges, they must complete an application, provide all supporting documentation including the Clearing Member Agreement, and pay all fees including the application fee and security deposit. All requirements are available on the MIAX Futures Website. MIAX

Futures applies similar standards to all clearing member applicants, whether corporations or some other organizational structure. By applying these similar standards universally, including to any clearing members affiliated with MIAX Futures, the Exchange guarantees a fair and open clearing membership application process and, in turn, fair and open access to its markets and services.

Operational. In order to clear MIAX Futures products, an individual or entity must have been granted clearing privileges by the Exchange. Clearing Members can then gain connectivity to Onyx and can, within specific parameters, provide connectivity to other market participants. A Clearing Member who engages in proprietary trading may also apply as an Onyx Direct Access Participant as described above. In addition, a Clearing Member must abide by all applicable operational MIAX Futures Rules which include the following:

Rule	Description
Rule 2100.02.	<u>Clearing Privileges</u> Provides that Clearing Members must be granted clearing privileges by the Exchange, conditioned on the clearing member continuing to meet certain Exchange terms and conditions, such as complying with all agreements and meeting minimum financial requirements.
Rule 2100.03	<u>Clearing Member Risk Management</u> Requires all Clearing Members to maintain risk management policies and procedures and to make them available to the Exchange and/or the CFTC upon request. It also gives the Exchange the right to impose further requirements at its discretion.

Financial. Clearing Members play a valuable role in the clearing process. Clearing Members are held to strict financial standards which are closely monitored. Clearing Members assume full financial and performance responsibility to the MIAX Futures Clearing House for all transactions executed through them and cleared by the MIAX Futures Clearing House. Clearing Members are responsible and accountable for every position they carry, whether it is for the account of a Non-Member, FCM, or its own proprietary account. The following non-exhaustive list are applicable MIAX Futures Rules detailing Clearing Member financial requirements:

Rule	Description
Rule 2101.00.	<u>Settlement Banks</u> Clearing Members are required to maintain and account at a-MIAX Futures approved settlement bank for making daily cash settlements for variation and collateral margin.
Rule 2104.01.	<u>Clearing Fee</u>

		Provides that the Exchange shall set clearing fees, which are made publicly available.
Rule 2105.00.	<u>Security Deposit</u>	Clearing Members are required to make a deposit to the Clearing House as security for its obligations to the Clearing House.
Rule 2106.00.	<u>Margins</u>	Provides that MIAX Futures sets minimum margin amounts and reserves the right to increase or decrease initial and maintenance margins, which Clearing Members collect from market participants. Provides that MIAX Futures accepts cash or U.S. Treasury Bills for margin. MIAX Futures also provides deadlines for receipt of margin funds from Clearing Members.
Rule 2106.01	<u>Protection of Customer Funds</u>	All funds deposited with MIAX Futures on behalf of customers of a Clearing Member must be held in an account identified as “customer segregated” to protect the customer funds.
Rule 2109.00.	<u>Clearing Member Financial Emergency</u>	Provides that the Exchange may suspend or take any other action to protect the best interests of a Clearing Member, the Exchange, or the marketplace, if the Exchange determines that there is a financial emergency regarding a Clearing Member.
Rule 2109.01.	<u>Clearing Member Insolvency</u>	Requires Clearing Members to immediately notify the Exchange of insolvency, at which time the Clearing Member shall be suspended.
Rule 2109.05.	<u>Collateral to be Restored</u>	If a Clearing Member's security deposits, margins, or performance bonds are applied in the event of a default, the Clearing Member must replenish the funds.
Rule 2110.00	<u>Clearing Members: Assessments</u>	Clearing Members may be required to pay assessments in proportion to their total security deposit requirements in the event funds in the MIAX Futures default waterfall (see Principle 13) were insufficient to cover any loss.

Key Consideration 2: *An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMIs specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavor to set requirements that have the least-restrictive impact on access that circumstances permit.*

PFMI #18

Customer Participant:

Customer market participants (participants who are not FCMs or Clearing Members) form a large portion of the trading activity on MIAX Futures markets. Even though MIAX Futures Clearing Members are tasked with the responsibility of maintaining and implementing the risk controls, MIAX Futures sets the framework for Clearing Members to work within as well as ensures that MIAX Futures has the authority to step in when necessary.

Legal. In order to mitigate general risk, all market participants must complete the appropriate application process (as discussed above) with the FCM they open an account with including a customer agreement which addresses risk disclosures among other items. Before FCMs may open a commodity futures account for a retail customer, the customer must receive a written disclosure statement and send back to the FCM a signed and dated acknowledgment that the customer has received and understood the statement. The statement informs the customer of some of the risks inherent in futures trading and asks the customer to consider carefully whether it is in a financial position to take such risks. There are comparable disclosure requirements before opening a commodity options account. Additionally, the market participant is bound by MIAX Futures Rules and subject to MIAX Futures' jurisdiction.

Operational. Throughout the application and authorization process to access Onyx as explained above, each step deliberately addresses the mitigation of operational risk. Each layer of access to Onyx - FCM, Clearing Member, customer, and MIAX Futures; direct or indirect - implements their own risk analyses and requirements. MIAX Futures Trading Operations must also certify the connection and authorize the market participant's access before they can commence trading.

Financial. To mitigate financial risk, market participants are required to set up and fund an account before they are allowed to trade on MIAX Futures markets, which includes posting all margin requirements as mentioned above. These financial requirements help ensure that there is adequate funding to cover the market participant's trading, as well as set the trading limits of the market participant so that they do not trade beyond what they can fund.

Once the funds are deposited with the FCM and eventually deposited with MIAX Futures, such funds are required to be held in an account identifiable as "customer segregated" in accordance with CFTC regulations and MIAX Futures Rule 2106.01. This requirement addresses the risk of commingling customer money. In an event such as a Clearing Member's bankruptcy, this requirement ensures that the market participant's money will still be in their account.

FCM:

Legal. In addition to the risk management requirements laid out in the MIAX Futures Rules, FCMs must also comply with applicable federal laws, namely CFTC regulations and NFA rules. For market participants in general and FCMs in particular, the Exchange imposes the minimum requirements as promulgated by the relevant federal regulators and industry organizations, such as the CFTC and NFA.

Operational. An FCM may not effect a transaction for a customer unless the customer specifically authorized the transaction by specifying the precise commodity interest and the exact amount of the commodity interest to be purchased or sold or authorized the FCM in writing to effect transactions for the account without the customer's specific authorization. An FCM always has discretion as to time and price when entering an order.

An FCM must furnish its customers with monthly statements that show, among other things, all transactions occurring in the month, all charges and credits to the account, and the account balance. In addition to monthly statements, an FCM must provide the customer, within the next business day, confirmation of each transaction made for the customer and a statement showing the net gain or loss from any offsetting positions.

Per CFTC regulations, all FCMs must keep a permanent record pertaining to their customers, including each customer's name, address, and occupation; and full, complete, and systematic records, together with all pertinent data and memoranda, of all transactions. Immediately upon receipt, FCMs must prepare a written record of a customer's order, including the date and time of receipt and the date and time it is transmitted for execution. In addition, a floor broker executing the trade must prepare a written record including the date and time of execution. A financial ledger for each customer must be maintained that includes a record of all transactions, credits, debits, etc. A record or journal must be maintained that shows all transactions made on each business day by the FCM. All records must be retained for five years and may be maintained in electronic form, but regardless of the form in which records are kept, they must be open to inspection by the CFTC, NFA, and the Department of Justice.

Financial. As discussed above, the CEA requires all FCMs to register as such, unless they qualify for an exemption. NFA and the Exchange are self-regulatory organizations that are required to enforce CFTC-approved minimum financial and reporting requirements for their members.

FCMs must satisfy minimum financial requirements for minimum net capital, customer funds, disclosure and other requirements for customers, and financial and other filings. For example, FCMs must maintain a specific minimum amount of adjusted net capital at all times. Should an FCM become undercapitalized at any time, it must provide immediate notice to the CFTC and must also notify its designated self-regulatory organization. MIAX Futures monitors and conducts reviews as required to ensure compliance with these and other MIAX Futures Rules.

In regards to customer funds, all customer funds for trading on the Exchange must be kept segregated from the FCM's own funds. This includes cash deposits and any securities or other property deposited by such customers to margin or guarantee futures trading. Segregated accounts must be titled for the benefit of the FCM's customers. Acknowledgements must be provided that would preclude a bank or Clearing House from recognizing a right of offset against the account for the FCM's debts. Customer funds in segregation have a bankruptcy preference in the event of FCM insolvency.

Whether a Clearing Member or not, FCMs must comply with all MIAx Futures Rules, including the financial and reporting requirements as detailed above and must comply with CFTC requirements, which provide that FCMs must file monthly unaudited financial reports with the Commission and their designated self-regulatory organizations. FCMs must also file certified annual financial reports. These reports include financial statements and CFTC-specific schedules, and also must include an independent auditor's opinion that covers the statements and schedules.

Clearing Member:

Legal. Clearing Members must also comply with applicable federal laws, namely CFTC regulations.

In addition to the CFTC regulations for Clearing Member risk management, the Exchange also requires Clearing Members to meet and maintain compliance with its risk management rules. Specifically, pursuant to MIAx Futures Rule 2100.03., MIAx Futures requires all MIAx Futures Clearing Members to maintain risk management policies and procedures and ensure that they are able to perform such risk management and operational functions at all times. MIAx Futures also reserves the right to review these procedures and the implementation of such as well as the authority to implement their own risk policies for customer transactions if necessary. Further, under CFTC Regulations each MIAx Futures Clearing Member must be reviewed periodically as part of a formal risk review process of said Clearing Members' risk management policies and procedures. Accordingly, MIAx Futures maintains current documentation of Clearing Members' Risk Management Programs and conducts regular risk reviews.

Operational. As part of CFTC, NFA, and MIAx Futures requirements, all MIAx Futures Clearing Members must be able to file necessary reports and complete all required communications with the MIAx Futures Clearing House. These requirements are verified through the application process which requires new Clearing Members to demonstrate compliance with all requirements, including DCO requirements, in terms of communications and risk. This requirement is contained within the MIAx Futures Rulebook. Clearing Members must also establish connectivity to Onyxin the same manner discussed above for non-member participants and FCMs.

Financial. The financial safeguards the Exchange has in place in terms of its Clearing Member requirements are set forth in the application for Clearing Privileges discussed above. These financial requirements are designed to effectively manage risk associated with the clearing activities the Clearing Member performs. These requirements are in place to protect not only the Exchange, but the customers of the Clearing Member, market participants in general, and the Clearing Member themselves. Applicable financial requirements have been set by the Exchange with risk management considerations in mind, while being conscious that said requirements do not unfairly or unreasonably restrict clearing membership at the Exchange or participation in the MIAx Futures marketplace.

Key Consideration 3: *An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.*

PFMI #18

Customer Participant:

The Exchange may suspend or revoke an Onyx Direct Access Participant's access to the Onyx Electronic Trading System for any of the reasons outlined in Rule 6.9, including if the market participant fails to meet Exchange requirements as outlined in the MIAX Futures Rules. Rule 6.12. further provides that where an ODAP's status is suspended or terminated, the ODAP still remains bound by MIAX Futures Rules and subject to the jurisdiction of the Exchange with respect to any and all matters arising from or in connection with its acts or omissions prior to the ODAP's suspension or termination.

Even though MIAX Futures requires Clearing Members to develop and implement risk management policies and procedures, Clearing Members are generally tasked with the responsibility of developing and maintaining the risk controls for market participants. However, MIAX Futures reviews market activity for all market participants to ensure they are following applicable MIAX Futures Rules. The MIAX Futures Market Regulation team is primarily responsible for ensuring compliance with MIAX Futures Rules, including the access rules. Market Regulation monitors market participants through daily market surveillance, trade practice investigations, audit trail investigations, and financial surveillance.

If MIAX Futures identifies additional risk in regards to the trading of any market participant, MIAX Futures has the authority pursuant to its Rules to take action by developing and imposing additional risk controls. These additional risk controls could be that the market participant is required to post additional margin or limiting the buying power of the market participant.

Pursuant to MIAX Futures Rules 2.1.2. and 2.1.3., all market participants trading on MIAX Futures markets are subject to the MIAX Futures Rules, including disciplinary actions. If a market participant breaches the participation requirements, Market Regulation may open an investigation if the breach is the cause of a violation of the MIAX Futures Rules. If Market Regulation determines that a violation exists, Market Regulation will issue a summary fine when appropriate or refer the investigation to the Disciplinary Committee. If the Disciplinary Committee agrees that a violation exists, they will issue a Notice of Charges and appropriate penalty to the offending party, giving the offending party the right to a hearing in front of the Hearing Committee. If imposed, such penalty could be the suspension of the market participant from trading on MIAX Futures markets.

Clearing Member:

The Exchange requires Clearing Members to guarantee the financial performance of all transactions executed through them and registered with the Exchange, including client positions. The Exchange also expects Clearing Members to undertake suitable credit monitoring and risk management of their clients.

The Exchange conducts direct monitoring of its Clearing Members on a regular basis. Please review Principles 4, 5, 6, and 7 in particular for specifics regarding risk management and oversight. MIAX Futures routinely monitors Clearing Members and holds Clearing Members responsible for any activity placed or conducted through a Clearing Member as part of its oversight responsibilities as a self-regulatory organization. Market Regulation, the NFA, and the CFTC play a role in ensuring these procedures are followed under their requirements as well.

While the Exchange may suspend a market participant from trading, there are also actions the Exchange may take that are less severe but also serve to protect the Exchange and its market participants.

A Clearing Member could be placed on the Risk Watch list. This watch list serves as an internal guide to the MIAX Futures Risk Team and Market Regulation when conducting their monitoring and surveillance duties and effectively places some Clearing Members on heightened surveillance due to internal assessment that such is necessary. The Exchange could also impose higher margin requirements, request additional capital or additional funds to be held as security deposit, or take any other actions the Exchange deems prudent to protect its interests and the interests of its Clearing Members and market participants.

MIAX Futures Rules provide that when the Exchange, in its discretion, determines that a Clearing Member is facing a questionable financial situation or that a financial emergency exists with respect to that Clearing Member, the Exchange can take immediate protective actions. Another example is in the event of a Clearing Member Default—MIAX Futures has the authority to take a number of steps in this instance, which are described in detail in Principle 13.

MIAX Futures Rules contain the procedures for suspension and orderly exit of a participant. Such Rules are posted on the MIAX Futures Website. When a participant fails to meet MIAX Futures requirements, that participant would no longer be in Good Standing. Losing this status could occur for various reasons and is determined in the sole discretion of the Exchange. This allows the Exchange the flexibility to take timely action to protect its interests, financial and otherwise, and the interests of third parties and market participants. In addition, in the event a Clearing Member is suspended or excused, the actions taken by the Exchange would include notification to the public. Typically, such notification would be made via announcement on the MIAX Futures Website but could also involve direct communications such as phone calls, conferences or meetings, and news releases aimed at informing the public and market participants of the event and any recommendations. Additionally, all disciplinary action taken by the Exchange including the suspension of a market participant is posted on the NFA Basic Website.

Clearing Members are bound by the same disciplinary procedures as market participants. If a Clearing Member is also an Onyx Direct Access Participant, the same standards apply to them regarding suspension or termination of Onyx access described in the Customer Participant section above. MIAX Futures Rules that govern termination of access to the Electronic Trading Platform include Rules 6.9., 6.20.. and 1813.00. discussed above.

PRINCIPLE #19: TIERED PARTICIPATION ARRANGEMENTS

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

Key Consideration 1: *An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.*

As a DCM and DCO, MIAX Futures' business is based on the trading activity of its market participants including Clearing Members, FCMs, and individual market participants who are transacting business on MIAX Futures markets. Therefore, in terms of risk generated by market participants, the primary risk to MIAX Futures is determined by the amount of positions a particular market participant has and not based on the type of relationship the market participant has with MIAX Futures. Regardless of the market participant's membership status, all market participants are required to meet the same standard requirements to trade on MIAX Futures markets.

Legal Risk

Legally, all market participants are under the jurisdiction of the CFTC and are subject to the CEA and CFTC regulations. Pursuant to MIAX Futures Rule 2.1.2., any person or entity that initiates or executes a transaction expressly consents to the jurisdiction of the Exchange and agrees to be bound by and comply with all MIAX Futures Rules. Market Regulation, which is primarily responsible for ensuring that market participants are complying with such requirements, monitors all market participants through trade, market, and financial surveillance, and their role is explained further below.

Financial Risk

As for financial risk, every market participant is required to set up an account with an FCM and fund that account in order to trade on MIAX Futures. In order to manage credit and liquidity risk, both Clearing Member and non-Member market participants must deposit and maintain initial and maintenance margins with their FCMs or MIAX Futures Clearing Members in accordance with the specified minimum requirements set forth in MIAX Futures Rules. On a daily basis, the clearing house marks each open position to market twice (at a minimum) and collects from those market participants via their MIAX Futures Clearing Members for losing positions and pays to those Clearing Members who have winning positions. In addition, MIAX Futures collects clearing margin on a daily basis for all open positions based on gross customer positions and net house positions from its Clearing Members. MIAX Futures sets margin requirements at a level that best protects the interests of market participants and the Exchange, provided that such requirements are always in compliance with the standards set forth in CFTC Regulation 39.13(g)(8), as amended. Additionally, pursuant to MIAX Futures Rules, both Clearing Member FCMs

and non-Member FCMs are required to comply with reporting and financial requirements and are monitored by the Market Regulation department.

In the event of a default of a direct participant such as a Clearing Member, MIAX Futures protects its market participants, both direct and indirect, by ensuring that all funds deposited with the Exchange on behalf of a Clearing Member are properly segregated from other customer accounts and identified as “customer segregated” in accordance with MIAX Futures Rules and applicable CFTC regulations. This is to ensure that a customer’s collateral is not used to discharge obligations arising from a default in a Clearing Member’s proprietary account. In order to protect the credit exposure of the Exchange in the event of a Clearing Member default, the Exchange may act immediately to attempt to transfer all customer positions and associated collateral to alternate Clearing Members. Other actions the Exchange may take pursuant to its Rules include suspension of clearing privileges, pursuit of legal action, retention of variation pays, and request for additional security deposit and/or performance bonds.

Operational Risk

In the event a Clearing Member is insolvent, the Clearing Member shall be immediately suspended from trading unless otherwise permitted by the Exchange to continue limited operation for the purpose of transferring or liquidating positions. The Exchange will follow the same procedures as explained above.

As for an operational disruption, the Exchange will follow the same protocol as if it was a default. The Exchange will ensure that all open positions held by both direct and indirect market participants are properly handled without financial loss. Additionally, MIAX Futures Rule 2100.03. requires that all Clearing Members maintain current written risk management policies and procedures, and ensure they are able to perform proper risk management and operational functions at all times. MIAX Futures has the authority to review these policies and procedures.

MIAX Futures Involvement

As mentioned above, Market Regulation is primarily responsible for ensuring that all market participants, both direct and indirect, are complying with all legal, financial, and operational requirements, as well as monitoring MIAX Futures markets for potential risk through trade practice and market surveillance. Market Regulation does not necessarily monitor on the basis of the type of relationship the market participant has with MIAX Futures, but rather, on the basis of trade activity and open positions a market participant may have with a MIAX Futures Clearing Member. Additionally, all market participants, including FCMs and Clearing Members, are subject to disciplinary action for failure to comply with the regulatory requirements. In performing its surveillance responsibilities, Market Regulation will always monitor as to the nature of the relationship an individual or entity has with MIAX Futures, but that alone does not determine the nature or type of disciplinary action Market Regulation may issue since all market participants are held to the same standards under MIAX Futures requirements when it comes to MIAX Futures Rules. Market Regulation conducts equal surveillance of both direct and indirect participants, but they enhance their surveillance of market participants with a large number of positions. Because there is a direct correlation between the

amount of positions being held by a market participant and the amount of risk, participants with more positions will receive more attention from Market Regulation.

As a self-regulatory organization, MIAX Futures has the obligation to conduct financial surveillance to ensure that FCMs who are Clearing Members at MIAX Futures are in compliance with applicable financial reporting requirements as well as to monitor their financial health. In addition, MIAX Futures performs surveillance over non-Clearing Member FCMs who have positions in MIAX Futures markets in an effort to ensure they will be able to meet their obligations to their customers and not pose additional undue risk to those individuals under CFTC and MIAX Futures requirements. Certain duties and obligations have been delegated to a designated self-regulatory organization that conducts audits and monitors the financial health of the FCMs, however, Market Regulation still conducts daily financial surveillance of all FCMs, including both Clearing Member FCMs and non-Member FCMs who are holding positions in MIAX Futures markets.

Pursuant to MIAX Futures Rules, the Exchange has the authority to develop and implement risk control policies for customer and proprietary transactions. MIAX Futures also has the authority to review the Clearing Members' risk management policies and procedures to ensure compliance with applicable CFTC and MIAX Futures requirements. Ultimately, pursuant to MIAX Futures Resolution 210.01.F., MIAX Futures has the authority to suspend and curtail trading of any market participant, both direct and indirect, if it appears that an emergency exists.

Through market, trade, and financial surveillance, Market Regulation is able to gather basic information about all market participants. Through the use of the automated surveillance system, Market Regulation is able to review and analyze trade data on a daily basis. By using an in-house program called the Onyx Futures Insight Tool, Market Regulation is also able to view working orders, order depth, price movement, market activity, etc., on a real-time daily basis. Additionally, pursuant to MIAX Futures Rules, Clearing Members and all FCMs are required to comply with financial and reporting requirements. Market Regulation is able to gather customer information from such reporting. For example, Clearing Members submit daily pay/collect data including customer financial information.

Market Regulation also conducts financial surveillance of all MIAX Futures FCMs and Clearing Members. Market Regulation reviews their submitted financials for any discrepancies or changes in the financial health of the firms. Specifically, Market Regulation reviews figures from financial statements and historical trends for any material changes. Among other information, Market Regulation evaluates the firms' pay/collect data, analyzes financial statements, monitors the receipt of financial statements as well as the timeliness and adequacy of such submissions, and reviews other audit reports of MIAX Futures Clearing Members and FCMs. If Market Regulation finds any discrepancies or potential issues, they will document such findings and conduct a further review. Market Regulation and a member of the Risk Team are responsible for this review, follow up, and escalation.

If Market Regulation determines that a Clearing Member or FCM appears to be in financial danger, or presents a financial risk to the Exchange or other Clearing Members and FCMs, Market Regulation will inform the Chief Regulatory Officer of the Exchange as well as the Risk Team immediately for further evaluation. The Risk Team may place the firm on its Watch List.

Additionally, pursuant to MIAX Futures Rule 2.3.2. MIAX Futures requires that all Clearing Members maintain a complete audit trail including the ability to track a customer order from the time of receipt through fill, allocation, or other disposition. Such information must include order and trade data. Market Regulation conducts annual reviews to ensure that such audit trail is maintained. Furthermore, pursuant to MIAX Futures Rule 2.3.1., all market participants initiating transactions on the Exchange must keep full, complete, and systematic records of their activity, and such records must be maintained for a minimum of five years. Market Regulation has the authority to request any and all records from any market participant regardless of whether or not they are an indirect or direct participant.

Key Consideration 2: *An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.*

PFMI #19

As previously mentioned, MIAX Futures does not differentiate between direct and indirect participants for the sake of potential risk. However, MIAX Futures has identified material dependencies between market participants, FCMs and Clearing Members. As mentioned, all market participants are required to set up an account with an FCM and fund that account in order to transact business on MIAX Futures—therefore, the market participants depend on the FCM for access. Knowing this, MIAX Futures monitors the financial and operational health of all FCMs with customer accounts. In addition to financial information gathered through Market Regulation’s financial surveillance, all FCMs with customers trading MIAX Futures futures and options contracts must immediately notify the Exchange of any material reduction in its net capital, working capital and/or its net worth, including the incurring of a contingent liability that would materially affect adjusted net capital, working capital and/or net worth should such liability become fixed. Also, in the event a Clearing Member is insolvent, the Clearing Member shall be immediately suspended from trading unless otherwise permitted by the Exchange to continue limited operation for the purpose of transferring or liquidating positions.

Additionally, in accordance with MIAX Futures Rules, if at any time the Exchange determines that there is a substantial question as to whether a financial or other type of emergency exists or may exist with respect to any Clearing Member, FCM, or market participant, the Exchange may take actions necessary to protect the best interest of the Exchange and the marketplace. This includes, but is not limited to, the authority to suspend or curtail trading, increase margin requirements, transfer customer contracts and margins, and activate default procedures.

As explained in Key Consideration 1, in the event of a default of a direct participant such as a Clearing Member, MIAX Futures protects its market participants, both direct and indirect, by ensuring that all funds deposited with the Exchange on behalf of a Clearing Member are properly segregated from other customer accounts and identified as “customer segregated” in accordance with MIAX Futures Rules and applicable CFTC regulations. In addition, to protect the credit exposure of the Exchange in the event of a Clearing Member default, MIAX Futures may take any or all of the actions previously described and set forth in MIAX Futures Rules.

Key Consideration 3: *An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.*

PFMI #19

As previously discussed, MIAX Futures has identified risk based on the amount of trade activity of a particular market participant. The more positions a market participant has, the more attention and surveillance they will receive.

MIAX Futures requires that large concentrations of open positions are carefully monitored daily. Market Regulation, in conjunction with the MIAX Futures Clearing House, reviews the various generated reports in order to detect potential problems or concentration of positions with any one Clearing Member. If Market Regulation detects potential problems or concentration of positions, they can recommend that the Exchange require that additional funding be placed with the Exchange either through margin or security deposits. In addition, Market Regulation, as well as the MIAX Futures Clearing House, can recommend other action including requesting additional information on trading strategy, intentions, or funding arrangements either from the Clearing Member or the market participant directly. Market Regulation also has the ability to recommend fines and/or suspensions for more serious trading abuses or failure to maintain proper policies and procedures as required by the CFTC and MIAX Futures Rules.

In addition to the above and what has been discussed elsewhere within this disclosure, Market Regulation reviews all open contract months, including deferred months, for any significant change in open interest held by Clearing Members. Market Regulation reviews trades, transfers, intentions, deliveries, Exchange for Physicals (“EFP”), Exchange for Risk (“EFR”), and ending positions long and short on a gross and net basis (customer and house) for each Clearing Member in each contract month.

Each day when applicable, Clearing Members provide large trader reports (“LTRs”) to MIAX Futures. The LTR lists MIAX Futures accounts that reached the reporting levels for MIAX Futures and/or options contracts. The LTR contains the account identification, expiration date, amount of futures and/or option positions (long or short, puts or calls), designation of commercial or noncommercial, the strike price, the account code and the reporting firm alpha name. Market Regulation reviews the reports on a daily basis

to identify accounts that are approaching single month, or all month, speculative position limits. Additionally, Market Regulation investigates any significant changes or concentrated positions as deemed necessary. If any account or owner approaches the position limits, Market Regulation will monitor daily activity to ensure it does not exceed the position limits during the trade day or at day-end.

Additionally, with respect to physically delivered products, Market Regulation carefully monitors the availability of deliverable grade grain in relation to open interest and concentrations of positions during delivery periods. Market Regulation contacts market participants directly during delivery periods in an effort to ensure the Exchange understands the intentions of its market participants and a smooth delivery process occurs to avoid risk being posed to the Exchange, Clearing Members, and market participants.

Key Consideration 4: *An FMI should regularly review its risks arising from tiered participation requirements and should take mitigating action when appropriate.*

PFMI #19

As previously mentioned, from a risk or surveillance perspective, MIAX Futures does not necessarily have tiered participation risks. Rather, risks are generated mainly from trading and the generation of open positions for those products MIAX Futures clears and oversight is thus performed on all market participants. However, the Exchange does routinely review its application procedures, its surveillance programs, and/or risk programs in an effort to ensure a level of protection for all participants whether they can be considered a direct or an indirect participant. For example, Market Regulation policies and procedures are documented in internal compliance manuals and policies, as well as the MIAX Futures Rules. The Clearing House has various manuals involving operational procedures and risk management policies and procedures that are regularly reviewed and updated due to changes in market conditions, best practices or regulatory changes. Many other policies and procedures are documented in the MIAX Futures Rules. Such Rules are reviewed and updated as needed to codify the above-mentioned practices. All amendments to MIAX Futures Rules are approved by the MIAX Futures Officers under delegated authority and/or the MIAX Futures Board of Directors and supplied to the CFTC.

PRINCIPLE #20: FMI LINKS

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

Key Consideration 1: *Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.*

MIAX Futures does not currently maintain link arrangements with any other FMIs or CCPs.

Key Consideration 2: *A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.*

PFMI #20

MIAX Futures does not currently maintain link arrangements with any other FMIs or CCPs.

Key Consideration 3: *Linked CSDs should measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between CSDs should be covered fully with high-quality collateral and be subject to limits.*

PFMI #20

The Exchange is not a CSD and therefore does not have any established CSD links.

Key Consideration 4: *Provisional transfers of securities between linked CSDs should be prohibited or, at a minimum, the retransfer of provisionally transferred securities should be prohibited prior to the transfer becoming final.*

PFMI #20

The Exchange is not a CSD and therefore does not have any established CSD links; provisional transfers of securities between linked CSDs are consequently not possible.

Key Consideration 5: *An investor CSD should only establish a link with an issuer CSD if the arrangement provides a high level of protection for the rights of the investor CSD's participants.*

PFMI #20

The Exchange is not a CSD and therefore does not have any established CSD links.

Key Consideration 6: *An investor CSD that uses an intermediary to operate a link with an issuer CSD should measure, monitor, and manage the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.*

PFMI #20

The Exchange is not a CSD and therefore does not have any established CSD links.

Key Consideration 7: *Before entering into a link with another CCP, a CCP should identify and manage the potential spill-over effects from the default of the linked CCP. If a link has three or more CCPs, each CCP should identify, assess, and manage the risks of the collective link arrangement.*

PFMI #20

MIAX Futures functions as the single CCP for its transactions and does not have any peer-to-peer or participant CCP link arrangements. At present, the Exchange also has no cross-margining agreements or cross-border links in place.

Key Consideration 8: *Each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfill its obligations to its own participants at any time.*

PFMI #20

The Exchange does not have any CCP link arrangements and thus has no current or potential future exposures related to a linked CCP or specifically, to contributing to default funds or sharing uncovered losses.

Key Consideration 9: *A TR should carefully assess the additional operational risks related to its links to ensure the scalability and reliability of IT and related resources.*

PFMI #20

MIAX Futures is not considered a trade repository.

PRINCIPLE #21: EFFICIENCY AND EFFECTIVENESS

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

Key Consideration 1: *An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.*

MIAX Futures is required under CFTC Regulation §39.38(a) to efficiently and effectively design its operating structure to meet the needs of its Clearing Members and the markets it serves. The structure under which the Clearing House operates allows for risk management by MIAX Futures Clearing Members and their customers. In particular, MIAX Futures' dual registration as both a DCO and DCM promotes effective and efficient risk management. Market participants have access to pre and post-trade risk controls to manage their exposures holistically. The Clearing House leverages information and services provided by MIAX Futures divisions outside of its own in performing its risk management function, such as the Legal and Market Regulation departments. The Clearing House performs its risk management function independently from the commercial and business divisions of MIAX Futures.

Additionally, MIAX Futures' Clearing technology is designed to clear any type of standardized futures or options product. MIAX Futures' systems are scalable to offer the trading, clearing, and settlement of different product types to meet the needs of market participants.

Further the MIAX Futures Risk Management Committee and Risk Advisory Working Group are comprised of Clearing Members and other key market stakeholders which prioritize the safety and efficiency of the Clearing House and the stability of the broader financial system. The committees provide a forum for representatives to provide their risk-based input to MIAX Futures on risk-based topics. This input allows MIAX Futures to efficiently and effectively meet the risk management needs of the market participants and the markets it serves. Additionally, when supporting a new product offering or altering a current service offering has a material impact on the risk profile of the Clearing House, MIAX Futures will solicit the risk management views of key market stakeholders through a variety of forums, including the committees listed above, and would also submit a rule filing to the CFTC. The rule filing process is transparent to market participants and rule changes and additions to the MIAX Futures Rulebook are publicly available on the MIAX Futures and CFTC websites.

Finally, the Exchange utilizes performance benchmarks when designing customer features and functionality into the internal market infrastructure. MIAX Futures continually strives to improve operational efficiency across the entire infrastructure. Improving efficiency and meeting customer requirements involves adopting flexible technologies and procedures and providing real-time market information and post-trade reporting. MIAX Futures staff communicates daily with Clearing Members and market participants to ensure that clearing and settlement systems are performing properly and that participants are, and are capable of, meeting the timelines set forth in MIAX Futures Rules.

Key Consideration 2: *An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.*

PFMI #21

The Exchange has defined operational goals related to the effectiveness of its market infrastructure operations and its role as a central counterparty. In addition, ensuring effective goals and objectives within the market infrastructure improves the efficiency, transparency, and risk mitigation of financial systems. Governance arrangements are designed to ensure that these goals are pursued and reviewed. The Board places a high priority on the safety and integrity of the Clearing House, and MIAX Futures' risk management framework are consistent with this priority.

The efficiency and effectiveness of MIAX Futures is continually assessed as it performs its daily operations. The Exchange introduced a new clearing system in 2023 and is committed to keeping its systems operational as reliable access allows market participants to effectively manage their risks. To that end, target capacity metrics are designed to provide sufficient headroom above and beyond an

unexpected surge in volume or activity. Capacity metrics are reviewed on a regular basis in context to changes in technology, customer behavior, and business objectives and changes.

Other goals and objectives include:

- Utilizing an effective execution and matching platform to ensure orders are filled and provide efficient trade routing to clearing systems.
- Maintaining strong risk management programs.
- Ensuring a fair and equitable trading environment and taking disciplinary action as required to ensure such an environment is constant.

Key Consideration 3: *An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.*

PFMI #21

The Board has governance and oversight responsibility of the Clearing House. The Board's primary objectives in this respect are to ensure that MIAX Futures' design, Rules, overall strategy, and major decisions appropriately reflect the legitimate interests of Clearing Members, customers of Clearing Members, and other relevant stakeholders, and to provide active governance that prioritizes the safety and efficiency of the Clearing House and generally supports the stability of the broader financial system. The Board regularly receives reports on the activities of the Clearing House and feedback received from the Risk Management Committee.

Additionally, MIAX Futures communicates daily with Clearing Members and market participants, and any communication regarding the efficiency and effectiveness of MIAX Futures services and procedures is taken under consideration immediately. The Exchange evaluates the potential benefits of changes, additions, or deletions to MIAX Futures services and procedures with regard to market participants along with possible effects on MIAX Futures business efficiency and effectiveness.

MIAX Futures also monitors and manages the market infrastructure and works to ensure it meets the needs to market participants. Multiple exchange environments are used to develop, test, and install new services in a safe and effective manner. Market participants are included in the development of parameters for changes, tests, and installation procedures in order to ensure the effectiveness of additional or modified MIAX Futures services. In addition, MIAX Futures participates in annual industry wide disaster recovery and business continuity testing to validate system effectiveness.

PRINCIPLE #22: COMMUNICATION PROCEDURES AND STANDARDS

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

Key Consideration 1: *An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.*

In order to operate efficiently, MIAX Futures communicates daily with market participants, Clearing Members, settlement banks, and the CFTC. In doing so, the Exchange uses multiple internationally accepted communication procedures and standards. In accordance with CFTC Regulations, MIAX Futures facilitates efficient payment, clearing, and settlement by accommodating internationally accepted communication procedures and standards, examples of which are provided below.

Secure File Transfer Protocol (“SFTP”): MIAX Futures uses SFTP to deliver files related to trade record and reconciliation data. SFTP encrypts commands and data when transferring files to prevent sensitive information from being transmitted openly over the network.

FIX Protocol: FIX is an industry standard electronic protocol for the real-time exchange of information. MIAX Futures utilizes FIX for file transfers and communications between it and the CFTC or other exchanges.

Position Report: the position report shows established positions for each instrument in which a firm has entered trades and holds positions.

Trade Capture Report: this report is used to confirm trade data to Clearing Members.

Margin and Settlement Files: MIAX Futures provides margin and settlement files to participants in formats that are easily digestible.

Fedwire Services: the Exchange uses Fedwire to safely facilitate margin, settlement, and collateral related payments.

PRINCIPLE #23: DISCLOSURE OF RULES, KEY PROCEDURES, AND MARKET DATA

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Key Consideration 1: *An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.*

MIAX Futures compiles its Rules, Bylaws, Resolutions, and Definitions on its Website. The MIAX Futures Rulebook is updated regularly and publicly available on the Website. MIAX Futures maintains a complete and comprehensive Rulebook that addresses all aspects of participation in the Exchange, including but not limited to, corporate governance, clearing membership, disciplinary procedures, futures and options electronic trading, warehouses, deliveries, Clearing House activities, risk management, and contract specifications. MIAX Futures monitors compliance with its Rulebook on an ongoing basis through regular reviews.

As explained below, MIAX Futures follows a detailed process when making amendments to its Rulebook. This process involves a thorough internal review of draft amendments, including, at a minimum, reviews by Exchange management and the President. Formal approval of the rules is granted by either the Exchange Officers under delegated authority or the Board of Directors. This thorough review process ensures that before amendments to the Rulebook become effective, they have been discussed and analyzed from multiple perspectives. In turn, these analyses work to ensure that the MIAX Futures Rulebook remains clear and comprehensive. Any changes to the Bylaws would be reviewed by Exchange Management and the President and would be formally approved in accordance with its Rules.

Further, the CFTC requires that all DCMs and DCOs file a certification with the CFTC that the new rule or rule amendment complies with the CEA and the CFTC's regulations or request CFTC approval of such rules and amendments. As such, every Rule amendment MIAX Futures makes must be submitted to the CFTC pursuant to the applicable CFTC regulation. Filing such certifications with the CFTC also provides the public with another forum of public disclosure as the certification submissions are posted on the CFTC's Website. As of the date of this disclosure, no inconsistencies have yet been identified, and MIAX Futures Rules have not been the subject of any judicial controversy.

Pursuant to MIAX Futures Rules, the Board of Directors has delegated authority to Exchange Officers to take emergency actions. As stated above, these procedures are publicly available as they are published in the MIAX Futures Rulebook.

As explained in greater detail in Principle 18, MIAX Futures also provides a detailed explanation of the procedures required for Clearing Member applicants, including all application forms to complete, supporting documentation to provide, and fees to submit. By posting these requirements and resources online, MIAX Futures ensures that the public, and especially any prospective Clearing Member, has the information it needs to successfully complete its application.

As stated above, MIAX Futures posts its entire Rulebook and other key procedures on its Website. Additionally, when there are amendments to the Rulebook or new policies or procedures contemplated, the Exchange will notify its Clearing Members, the CFTC, and the general public through various means including, but not limited to, Rulebook updates, CFTC notification or certification submissions, and alerts, all of which are also available for reference on the MIAX Futures Website.

Key Consideration 2: *An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participant's rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.*

PFMI #23

MIAX Futures, with operational services from MIH, maintains both its own clearing system and the Onyx electronic trading system. MIAX Futures clearing system, which launched in June 2023, is designed to support its daily clearing and settlement services to the marketplace. Key areas of focus are systems security, speed, reliability, functionality, and capacity. Details on the MIAX Futures clearing system, particularly on those systems for which MIAX Futures Clearing Members interact, are available on the MIAX Futures Website. MIAX Futures maintains the necessary powers to employ changes to its clearing system and would inform market participants of such changes through alerts that are publicly available on the MIAX Futures Website and emailed to Clearing Members. The rights and obligations of MIAX Futures' Clearing Members and the risks incurred from such membership are clearly disclosed in the MIAX Futures Rulebook, which is available on the MIAX Futures Website along with additional information relating to clearing membership. In addition, MIAX Futures manuals regarding the administration of various departments of the Exchange have been codified and while such manuals are not specifically available via the Website, they are provided to the CFTC as part of various rule enforcement reviews to ensure compliance with all necessary requirements.

MIAX Futures launched the Onyx electronic trading system on June 29, 2025. Onyx is an electronic trading platform built on proprietary technology that powers multiple platforms to provide for the trading of futures and options in geographically diverse locations. Information pertaining to Onyx is publicly available on the MIAX Futures Website and includes, but is not limited to, the Onyx FAQs, Onyx Risk Protections Guide, Onyx User Manual, and Member Firm Portal user Manual. The Exchange maintains the necessary powers to employ changes to Onyx and would inform market participants of such changes through alerts that are publicly available on the MIAX Futures Website and emailed to participants. The rights and obligations of Onyx users and the risks incurred from such usage are clearly disclosed in the MIAX Futures Rulebook and Website.

As discussed above, the Exchange monitors Onyx through enforcement of the applicable MIAX Futures Rules. MIAX Futures Rule 5.15, for example, limits the liability of the Exchange for losses or damages arising out of the use of the electronic trading system. All contracts traded electronically, as well as the Clearing Members and any market participants entering into such transactions, are fully subject to this rule and other applicable MIAX Futures Rules.

To actively trade as an individual market participant, one must, at a minimum, fund a trading account with an FCM. As the level of participation increases to the level of an FCM which trades on behalf of customers, additional registration and financial requirements apply. As stated earlier, these requirements are generally promulgated by the CFTC and NFA. The Exchange requires that its market participants, at a minimum, comply with applicable federal regulations or industry requirements. When a market participant

contemplates a clearing membership relationship within the Exchange, additional requirements apply as discussed in more detail in Principle 18.

The requirements set forth by the Exchange for its Clearing Members are minimum requirements as established by federal regulations or industry organizations. Applicable financial requirements have been set by the Exchange with risk management considerations in mind, while recognizing that said requirements do not unfairly or unreasonably restrict clearing membership in the Exchange or participation in the MIAX Futures marketplace. The participation criteria are posted on the MIAX Futures Website for the general public to view. The MIAX Futures Rules, which document the Exchange's overall framework of requirements for participation, and risks or restrictions connected with such participation, are also posted on the MIAX Futures Website for the general public to access. In addition, the CFTC periodically reviews the participation criteria and restrictions when conducting rule enforcement reviews. By these means, the Exchange conveys to its participants their rights, obligations, and risks associated with participation in the MIAX Futures marketplace.

Key Consideration 3: *An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of MIAX Futures' rules and procedures and the risks they face from participating in MIAX Futures.*

PFMI #23

In addition to the information the Exchange provides to its market participants described in *Key Consideration 2*, MIAX Futures also provides various procedures and manuals for market participants' reference and training, depending upon their particular needs. The Exchange staff is accessible to discuss any questions with market participants to ensure proper use and understanding of applicable processes. For example, Clearing Members work closely with the MIAX Futures Clearing House and would have access to the clearing operations documents, and Clearing staff would engage with the Clearing Member to train and ensure proper connectivity, use, and understanding of the applicable systems. MIAX Futures provided Clearing Members with extensive training videos and manuals on how to use the new Clearing System that launched in June 2023. The MIAX Futures Website contains various industry webinars and a frequently asked questions page designed to act as another educational resource for market participants. Lastly, MIAX Futures posts a Disclaimer on its Website, which is intended to inform market participants and the general public of the risks associated with trading futures and options. Specifically, the disclaimer makes clear that all decisions based on the information MIAX Futures provides are the responsibility of the individual.

To assess the effectiveness of the education available to its market participants and to ensure compliance with the Rulebook and federal regulations or industry requirements, the Exchange engages in regular ongoing compliance monitoring. Market Regulation is tasked with specific financial, trade practice, audit trail, and reporting deadline surveillance. It also conducts investigations and, when necessary, recommends disciplinary action and imposes summary fines to enforce compliance with said requirements. More specifically, Market Regulation monitors and reviews all of the Clearing Members'

required submissions to ensure that such submissions are timely and accurate. In addition, MIAX Futures has been involved with various markets for over 140 years. MIAX Futures believes this history and the continued ability to service the needs of MIAX Futures market participants over this time shows ample evidence of MIAX Futures' ability to adapt, change, and implement new processes and procedures and rules that in turn are passed to market participants for their knowledge and understanding. Without proper understanding or oversight, MIAX Futures may lose its reputation as a safe and secure entity in which to transact business and as a result cease trading derivatives products to those who look for appropriate risk management tools for managing their daily risks associated with their business. From that standpoint, MIAX Futures believes this public disclosure document also supplements that knowledge which is already understood when it comes to transacting business with the Exchange.

In cases where such actions are not material, MIAX Futures will be proactive with its education techniques by attempting to help the market participant more clearly understand his or her obligations. This can be done through simply contacting the market participant and informing them of their obligations or scheduling and completing training sessions with Exchange personnel. Each of these methods is considered helpful for non-material misunderstandings or issues. In addition, as previously mentioned, MIAX Futures ensures jurisdiction over all market participants via the MIAX Futures Rulebook and clearly states that it is the responsibility of each market participant to fully understand and comprehend all Rules. Therefore, in matters that affect MIAX Futures or other market participants more directly, Market Regulation performs daily reviews and checks for instances of noncompliance. For example, if a Clearing Member misses a deadline or submits incomplete or inaccurate information, the Exchange, via Market Regulation, has the authority to impose fines or refer the matter for further disciplinary action. Should an instance of noncompliance rise to the level of Clearing Member default, the Exchange would follow necessary remediation management procedures as outlined in internal procedures and applicable Rules as discussed in more detail in Principle 13 and the MIAX Futures Rulebook.

Key Consideration 4: *An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.*

PFMI #23

As with much of the information discussed in this disclosure thus far, the various fees MIAX Futures requires for services are publicly available on the MIAX Futures Website. As noted in *Key Consideration 1*, MIAX Futures Resolution 210.01.F. provides authority to Exchange Officers to set fees.

The Exchange requires applicants for Clearing Membership to pay an application fee. The information on this fee is provided in the Clearing Membership application documentation also available on the Website. The posted Exchange and Clearing fees are based in Rules, specifically set by Resolution, which provide the applicable rates. Additionally, rates are discounted when trades are transacted beyond set threshold levels.

The specific fees charged for transactions such as EFR and EFP are also available on the MIAX Futures Website.

As stated above, Exchange and Clearing fees are typically set by Resolution or action taken by Exchange Officers. The Exchange typically issues alerts when either changing fees or introducing new programs with related fees. These notices are provided to clearing members, market participants, and/or the public with as much advance notice as the particular circumstance may permit.

All parties desiring access through Onyx as described in *Key Consideration 2* will be provided with information on the applicable technology systems and related methods of communication. In addition, should a market participant wish to become a Clearing Member, specific fee and requirements for such are fully disclosed prior to such an occurrence. At no time should there be an instance where a market participant is unaware of a hidden fee or charge for conducting business with MIAX Futures.

Key Consideration 5: *An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.*

PFMI #23

This disclosure represents MIAX Futures' seventh published response to the CPMI-IOSCO Disclosure Framework and evidences that the Exchange is dedicated to regularly updating its responses as required. The Exchange has policies in place to regularly update this disclosure upon the implementation of any material changes, and at a minimum, every two years. All price, volume, and other relevant information may be found on the MIAX Futures Website.

MIAX Futures makes information available regarding daily volume and open interest. This information can be found daily on the MIAX Futures Website, and details the total volume, open interest, block trades, EFPs, EFRs, transfers, give-ups, and the number of each that were transacted electronically. These figures are organized by contract and contract month. Additionally, MIAX Futures makes the details surrounding its guaranty fund public, as well as various market data, financial statements, and the Exchange's annual corporate report.

Aside from the quantitative information MIAX Futures discloses on a daily, monthly, or annual basis, all relevant qualitative data is disclosed and made publicly available through the completion, publication, and update of this disclosure. Specific alerts may contain quantitative information as well when deemed appropriate. These items are also posted to the MIAX Futures Website.

MIAX Futures relies on its Website as its primary public forum in which Clearing Members, market participants, and the general public can access relevant information. As provided in response to Principle 1 of this disclosure, MIAX Futures is a Delaware Limited Liability Company and has its principal place of business in Minnesota. It conducts business only in the United States, where it is under the oversight of

the CFTC and is bound by all relevant U.S. laws and regulations. As such, MIAX Futures presently makes its information available in English. Nonetheless, should MIAX Futures be held to another jurisdiction's standards in the future, the Exchange would make reasonable adjustments to its disclosure or notice practices to accommodate participants in that foreign jurisdiction.

V. ANNEX OF ADDITIONAL PUBLICLY AVAILABLE RESOURCES

All publicly available resources issued by the Exchange are available on its Website at <https://www.miaxglobal.com/markets/futures/miax-futures>.