

**LedgerX LLC – Exhibit A-1
General Information/Compliance**

Attach as Exhibit A–1, a regulatory compliance chart setting forth each Core Principle and providing citations to the Applicant’s relevant rules, policies, and procedures that address each Core Principle, and a brief summary of the manner in which Applicant will comply with each Core Principle.

Core Principle or Other Requirement	LedgerX LLC Rule, Policy or Procedure	Relevant Exhibit(s)
(A) COMPLIANCE.—		
<p>(i) IN GENERAL.—To be registered and to maintain registration as a derivatives clearing organization, a derivatives clearing organization shall comply with each core principle described in this paragraph and any requirement that the Commission may impose by rule or regulation pursuant to section 8a(5).</p> <p>(ii) DISCRETION OF DERIVATIVES CLEARING ORGANIZATION.—Subject to any rule or regulation prescribed by the Commission, a derivatives clearing organization shall have reasonable discretion in establishing the manner by which the derivatives clearing organization complies with each core principle described in this paragraph.</p>	<p>LedgerX LLC (“LedgerX”) is applying for registration as a derivatives clearing organization (“DCO”) by submitting Form DCO (the “Application”). Once registered, LedgerX will comply with the DCO Core Principles. As demonstrated in this Application, LedgerX had drafted its Rules, Compliance Manual, Business Continuity Plan, Enterprise Risk Management Plan and Operations Manual, and has designed LedgerX’s clearing operations to be compliant with the DCO Core Principles and the Commodity Exchange Act, as amended (“CEA”), and other applicable CFTC regulations promulgated thereunder.</p>	<p>This Application, including all exhibits and attachments.</p>

(B) FINANCIAL RESOURCES.—

(i) **IN GENERAL.**—Each derivatives clearing organization shall have adequate financial, operational, and managerial resources, as determined by the Commission, to discharge each responsibility of the derivatives clearing organization.

(ii) **MINIMUM AMOUNT OF FINANCIAL RESOURCES.**— Each derivatives clearing organization shall possess financial resources that, at a minimum, exceed the total amount that would—(I) enable the organization to meet its financial obligations to its members and participants notwithstanding a default by the member or participant creating the largest financial exposure for that organization in extreme but plausible market conditions; and (II) enable the derivatives clearing organization to cover the operating costs of the derivatives clearing organization for a period of 1 year (as calculated on a rolling basis).

LedgerX maintains sufficient financial, operational and managerial resources to discharge each responsibility of a DCO. LedgerX maintains sufficient financial resources by operating a fully-collateralized DCO and by collecting an appropriate level of fees from Participants for the provision of clearing and settlement services. LedgerX's CFO is engaged with LedgerX's accountants and auditors and possesses knowledge of the CFTC's financial resources requirements to enable LedgerX to satisfy the CFTC's financial resources requirements. Internal manuals, including the Compliance Manual, and financial reporting form templates enable LedgerX to effectively report the DCO's financial resources to the CFTC.

LedgerX's operational resources are sufficient to perform clearing operations because LedgerX has established relationships with a bank and other custodial service providers and a swap data repository. LedgerX's internal operations will enable the effective clearing and settlement of contracts offered by LedgerX's swap execution facility. Internal operational procedures are set forth in a comprehensive manner in the Operations Manual. Finally, LedgerX managerial resources are sufficient to perform the functions of each vital area of the DCO, with appropriate cross-training to ensure that managerial resources will remain satisfactory in the event of a manager's absence.

Exhibits B-1, B-2, B-3 and B-4
Financial statements
Independent auditor review report

(C) PARTICIPANT AND PRODUCT ELIGIBILITY.—		
<p>(i) IN GENERAL.—Each derivatives clearing organization shall establish—(I) appropriate admission and continuing eligibility standards (including sufficient financial resources and operational capacity to meet obligations arising from participation in the derivatives clearing organization) for members of, and participants in, the derivatives clearing organization; and (II) appropriate standards for determining the eligibility of agreements, contracts, or transactions submitted to the derivatives clearing organization for clearing.</p> <p>(ii) REQUIRED PROCEDURES.—Each derivatives clearing organization shall establish and implement procedures to verify, on an ongoing basis, the compliance of each participation and membership requirement of the derivatives clearing organization.</p> <p>(iii) REQUIREMENTS.—The participation and membership requirements of each derivatives clearing organization shall—(I) be objective; (II) be publicly disclosed; and (III) permit fair and open access.</p>	<p>LedgerX has established transparent and objective Participant eligibility criteria that allow for open access to LedgerX. The eligibility criteria are disclosed in the Rules, specifically in Chapter 3 of the Rules. All Participants must complete an application process to become a Participant and comply with all Rules to continue to be a Participant. Any violation of the Rules would result in a Disciplinary Action against the Participant.</p> <p>As set forth in the Operations Manual, LedgerX has established a product review process that set forth the requirements for determining eligibility of agreements, contracts or transactions submitted to LedgerX for clearing.</p>	<p>Exhibits C-1 and C-2, including Participant Application and Agreement, Liquidity Provider Agreement, User Agreement and Operations Manual LedgerX Rules</p>
(D) RISK MANAGEMENT.—		
<p>(i) IN GENERAL.—Each derivatives clearing organization shall ensure that the derivatives clearing organization possesses the ability to manage the risks associated with discharging the responsibilities of the derivatives clearing organization through the use of appropriate tools and procedures.</p>	<p>LedgerX is a fully-collateralized, non-intermediated derivatives clearing organization. Accordingly, variation margin calls and related margin methodologies are not necessary. Chapter 7 of the LedgerX Rules sets forth the full-collateralization requirements to which Participants must adhere, as well as the forms of acceptable collateral Participants may</p>	<p>Exhibits D-1, D-2, D-3 and D-4 Enterprise Risk Management Plan Operations Manual Request for No-Action Relief LedgerX Rules</p>

<p>(ii) MEASUREMENT OF CREDIT EXPOSURE.—Each derivatives clearing organization shall—(I) not less than once during each business day of the derivatives clearing organization, measure the credit exposures of the derivatives clearing organization to each member and participant of the derivatives clearing organization; and (II) monitor each exposure described in subclause (I) periodically during the business day of the derivatives clearing organization.</p> <p>(iii) LIMITATION OF EXPOSURE TO POTENTIAL LOSSES FROM DEFAULTS.—Each derivatives clearing organization, through margin requirements and other risk control mechanisms, shall limit the exposure of the derivatives clearing organization to potential losses from defaults by members and participants of the derivatives clearing organization to ensure that— (I) the operations of the derivatives clearing organization would not be disrupted; and (II) nondefaulting members or participants would not be exposed to losses that nondefaulting members or participants cannot anticipate or control.</p> <p>(iv) MARGIN REQUIREMENTS.—The margin required from each member and participant of a derivatives clearing organization shall be sufficient to cover potential exposures in normal market conditions.</p> <p>(v) REQUIREMENTS REGARDING MODELS AND PARAMETERS.—Each</p>	<p>post to the clearinghouse.</p> <p>Internal procedures for collecting the collateral necessary to fully-collateralize each trade are set forth in the Operations Manual. The Enterprise Risk Management Plan thoroughly describes the way in which LedgerX, with the assistance of the Risk Management Committee, will manage its risks, and any potential risks that could threaten the security of LedgerX.</p>	
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<p>model and parameter used in setting margin requirements under clause (iv) shall be—(I) risk-based; and (II) reviewed on a regular basis.</p>		
(E) SETTLEMENT PROCEDURES.—		
<p>Each derivatives clearing organization shall—</p> <p>(i) complete money settlements on a timely basis (but not less frequently than once each business day);</p> <p>(ii) employ money settlement arrangements to eliminate or strictly limit the exposure of the derivatives clearing organization to settlement bank risks (including credit and liquidity risks from the use of banks to effect money settlements);</p> <p>(iii) ensure that money settlements are final when effected;</p> <p>(iv) maintain an accurate record of the flow of funds associated with each money settlement;</p> <p>(v) possess the ability to comply with each term and condition of any permitted netting or offset arrangement with any other clearing organization;</p> <p>(vi) regarding physical settlements, establish rules that clearly state each obligation of the derivatives clearing organization with respect</p>	<p>LedgerX’s Rules and internal procedures ensure compliance with Core Principle E. For example, Rule 7.1 provides that “[f]und transfers made by a Participant to the Exchange or by the Exchange to a Participant are irrevocable and unconditional when effected.” Chapter 6 informs Participants on the way in which a Participant may deposit or withdraw funds. LedgerX’s Operations Manual includes step-by-step procedures for asset transfers from LedgerX to a Participant, and from a Participant to LedgerX. LedgerX maintains settlement bank monitoring procedures to ensure the safety and soundness of each of its settlement banks. Currently, LedgerX does not provide netting arrangements for LedgerX contracts.</p>	<p>Exhibits E-1, E-2 and E-3 LedgerX Rules Operations Manual Banking agreements</p>

<p>to physical deliveries; and</p> <p>(vii) ensure that each risk arising from an obligation described in clause (vi) is identified and managed.</p>		
(F) TREATMENT OF FUNDS.—		
<p>(i) REQUIRED STANDARDS AND PROCEDURES.—Each derivatives clearing organization shall establish standards and procedures that are designed to protect and ensure the safety of member and participant funds and assets.</p> <p>(ii) HOLDING OF FUNDS AND ASSETS.—Each derivatives clearing organization shall hold member and participant funds and assets in a manner by which to minimize the risk of loss or of delay in the access by the derivatives clearing organization to the assets and funds.</p> <p>(iii) PERMISSIBLE INVESTMENTS.—Funds and assets invested by a derivatives clearing organization shall be held in instruments with minimal credit, market, and liquidity risks.</p>	<p>Rule 7.3 provides that Participant funds shall be segregated from LedgerX’s proprietary funds. In addition to segregating Participant funds, LedgerX has established internal procedures to ensure the safety of Participant funds.</p> <p>For example, two LedgerX administrators are required to perform most treasury functions involving Participant funds. Two Participant Authorized Representatives are required to make a withdrawal request. Currently, LedgerX does not invest Participant funds.</p> <p>LedgerX maintains internal settlement bank selection criteria and periodically monitors each settlement bank to ensure that the bank(s) continues to satisfy the criteria.</p>	<p>Exhibits F-1, F-2 and F-3 Operations Manual Banking agreements LedgerX Rules</p>
(G) DEFAULT RULES AND PROCEDURES.—		
<p>(i) IN GENERAL.—Each derivatives clearing organization shall have rules and procedures designed to allow for the efficient, fair, and safe management of events during which members or participants—(I) become insolvent; or (II) otherwise default on the obligations of the members or participants to the derivatives clearing organization.</p> <p>(ii) DEFAULT PROCEDURES.—Each</p>	<p>LedgerX operates a fully-collateralized DCO. By requiring the necessary collateral for each trade to be posted with LedgerX before trade execution, LedgerX ensures that a Participant default would not impact LedgerX or other Participants. Chapter 7 details the requirements related to full collateralization and to which all Participants must adhere.</p>	<p>Exhibit G Operations Manual LedgerX Rules</p>

<p>derivatives clearing organization shall—(I) clearly state the default procedures of the derivatives clearing organization;</p> <p>(II) make publicly available the default rules of the derivatives clearing organization; and (III) ensure that the derivatives clearing organization may take timely action—(aa) to contain losses and liquidity pressures; and (bb) to continue meeting each obligation of the derivatives clearing organization.</p>		
(H) RULE ENFORCEMENT.—		
<p>Each derivatives clearing organization shall—</p> <p>(i) maintain adequate arrangements and resources for—(I) the effective monitoring and enforcement of compliance with the rules of the derivatives clearing organization; and (II) the resolution of disputes;</p> <p>(ii) have the authority and ability to discipline, limit, suspend, or terminate the activities of a member or participant due to a violation by the member or participant of any rule of the derivatives clearing organization; and</p> <p>(iii) report to the Commission regarding rule enforcement activities and sanctions imposed against members and participants as provided in clause (ii).</p>	<p>LedgerX has the authority and ability to enforce LedgerX Rules. Pursuant to Rule 3.1, Participants and their authorized personnel with access to Ledger X consent to and agree to be subject to LedgerX’s jurisdiction. LedgerX’s Compliance Department monitors the LedgerX market and performs trade practice and market manipulation surveillance to ensure that Participants comply with the Rules and, specifically with Chapter 8 of the Rules. Chapter 8 sets forth the types of activities that are prohibited on the LedgerX Platform.</p> <p>Chapter 9 sets forth in a transparent manner the disciplinary procedures to which LedgerX adheres in the event that a Participant is suspected of violating a Rule. The Compliance Department is responsible for investigating and prosecuting suspected Rule violations.</p>	<p>Exhibit H</p> <p>Compliance Manual</p> <p>LedgerX Rules</p>
(I) SYSTEM SAFEGUARDS.—		
<p>Each derivatives clearing organization shall—</p>	<p>LedgerX continually monitors for actual or</p>	<p>Exhibit I</p>

<p>(i) establish and maintain a program of risk analysis and oversight to identify and minimize sources of operational risk through the development of appropriate controls and procedures, and automated systems, that are reliable, secure, and have adequate scalable capacity;</p> <p>(ii) establish and maintain emergency procedures, backup facilities, and a plan for disaster recovery that allows for—(I) the timely recovery and resumption of operations of the derivatives clearing organization; and (II) the fulfillment of each obligation and responsibility of the derivatives clearing organization; and</p> <p>(iii) periodically conduct tests to verify that the backup resources of the derivatives clearing organization are sufficient to ensure daily processing, clearing, and settlement.</p>	<p>threatened risks. LedgerX’s technology systems involve a high degree of security to prevent system outages and cyber-attacks. LedgerX technology staff conducts periodic audits to verify the integrity of LedgerX’s technology systems.</p> <p>Each department maintains a risk management plan and senior management meet together on a frequent basis. Senior management submits reports, including risk reports, to the Risk Management Committee, which is responsible for overseeing LedgerX’s Enterprise Risk Management plan.</p> <p>LedgerX has established a Business Continuity Plan that would be activated in the event of an emergency or other circumstances warranting activation of such plan. Rule 2.11 describes the procedures LedgerX will follow to declare an emergency.</p>	<p>SEF Technology Questionnaire</p> <p>Business Continuity Plan</p> <p>Enterprise Risk Management Plan</p> <p>LedgerX Rules</p>
(J) REPORTING.—		
<p>Each derivatives clearing organization shall provide to the Commission all information that the Commission determines to be necessary to conduct oversight of the derivatives clearing organization.</p>	<p>LedgerX will submit required reports, including daily open interest and other contract-specific information reports, and quarterly and annual financial reports. LedgerX’s Chief Compliance Officer will submit an annual compliance report as required by CFTC Regulation 39.10(c)(3). LedgerX’s Compliance Manual sets forth internal procedures for compliance with reporting obligations, and LedgerX has templates for various types of reports.</p>	<p>Exhibit J</p> <p>Reporting templates</p> <p>Compliance Manual</p>
(K) RECORDKEEPING.—		

<p>Each derivatives clearing organization shall maintain records of all activities related to the business of the derivatives clearing organization as a derivatives clearing organization—</p> <p>(i) in a form and manner that is acceptable to the Commission; and</p> <p>(ii) for a period of not less than 5 years.</p>	<p>LedgerX Rule 2.13 sets forth LedgerX's recordkeeping policy, which is compliant with CFTC Regulation 1.31. LedgerX's internal recordkeeping policies are set forth in the Record Retention Policy.</p>	<p>Exhibit K LedgerX Record Retention Policy LedgerX Rules</p>
<p>(L) PUBLIC INFORMATION.—</p>		
<p>(i) IN GENERAL.—Each derivatives clearing organization shall provide to market participants sufficient information to enable the market participants to identify and evaluate accurately the risks and costs associated with using the services of the derivatives clearing organization.</p> <p>(ii) AVAILABILITY OF INFORMATION.—Each derivatives clearing organization shall make information concerning the rules and operating and default procedures governing the clearing and settlement systems of the derivatives clearing organization available to market participants.</p> <p>(iii) PUBLIC DISCLOSURE.—Each derivatives clearing organization shall disclose publicly and to the Commission information concerning—(I) the terms and conditions of each contract, agreement, and transaction cleared and settled by the derivatives clearing organization; (II) each clearing and other fee that the derivatives clearing organization charges the members and participants of the derivatives clearing organization; (III) the</p>	<p>LedgerX makes various information public, as required by CFTC regulations. For example, LedgerX's Rules are publicly available on LedgerX's website. LedgerX's procedures for making information public are incorporated in the Operations Manual.</p>	<p>Exhibit L Operations Manual</p>

<p>margin-setting methodology, and the size and composition, of the financial resource package of the derivatives clearing organization; (IV) daily settlement prices, volume, and open interest for each contract settled or cleared by the derivatives clearing organization; and (V) any other matter relevant to participation in the settlement and clearing activities of the derivatives clearing organization.</p>		
(M) INFORMATION-SHARING.—		
<p>Each derivatives clearing organization shall—</p> <p>(i) enter into, and abide by the terms of, each appropriate and applicable domestic and international information-sharing agreement; and</p> <p>(ii) use relevant information obtained from each agreement described in clause (i) in carrying out the risk management program of the derivatives clearing organization.</p>	<p>LedgerX has entered into an arrangement with a swap data repository whereby LedgerX shares information related to swaps with the swap data repository.</p> <p>LedgerX has not entered into information sharing agreements with other clearing houses, exchanges or regulatory agencies. LedgerX will enter into international information-sharing agreements as the CFTC may require from time-to-time.</p>	<p>Exhibit M</p> <p>Swap data repository agreement, attached to Exhibit A-10</p>
(N) ANTITRUST CONSIDERATIONS.—		
<p>Unless necessary or appropriate to achieve the purposes of this Act, a derivatives clearing organization shall not—</p> <p>(i) adopt any rule or take any action that results in any unreasonable restraint of trade; or (ii) impose any material anticompetitive burden.</p>	<p>LedgerX promotes a culture of compliance, including compliance with antitrust laws and Core Principle N. LedgerX imposes fees that are equal across classes, and such fees are designed to be nondiscriminatory.</p> <p>LedgerX’s Participant eligibility criteria are designed to be objective standards that all Participants must satisfy. LedgerX does not impose minimum financial standards or other onerous criteria that could be viewed as</p>	<p>Exhibit N</p> <p>Compliance Manual</p>

	discriminatory or unfair. Rather, LedgerX has designed the Participant eligibility criteria and the Rules to allow for open access. To ensure such compliance with Core Principle N, LedgerX has incorporated these provisions in the LedgerX Compliance Manual.	
(O) GOVERNANCE FITNESS STANDARDS.—		
(i) GOVERNANCE ARRANGEMENTS.— Each derivatives clearing organization shall establish governance arrangements that are transparent—(I) to fulfill public interest requirements; and (II) to permit the consideration of the views of owners and participants.	LedgerX has established governance arrangements that are transparent and that fulfill the requirements imposed by the Commodity Exchange Act and the CFTC’s regulations promulgated thereunder. The Board is composed of no less than two public directors, who must not have a material relationship as defined in Rule 2.2.F.	Exhibit O LedgerX Rules
(ii) FITNESS STANDARDS.—Each derivatives clearing organization shall establish and enforce appropriate fitness standards for—(I) directors; (II) members of any disciplinary committee; (III) members of the derivatives clearing organization; (IV) any other individual or entity with direct access to the settlement or clearing activities of the derivatives clearing organization; and (V) any party affiliated with any individual or entity described in this clause.	Directors and officers must satisfy eligibility criteria as set forth in Rule 2.4. The eligibility requirements of Disciplinary Panel and Appeals Committee members are transparently provided in Rule 2.10. LedgerX imposes Participant eligibility criteria, which are incorporated in the Rules under Rule 3.2.	
(P) CONFLICTS OF INTEREST.—		
Each derivatives clearing organization shall— (i) establish and enforce rules to minimize conflicts of interest in the decision-making process of the derivatives clearing organization; and	LedgerX maintains policies related to conflicts of interest, including a conflicts of interest policy for directors that is provided in the Rules. Specifically, Rule 2.12 describes the procedures to which a director must adhere in the event such director has a financial interest	Exhibit P LedgerX Rules

(ii) establish a process for resolving conflicts of interest described in clause (i).	conflict or is a named party in interest in any matter that is before the board for deliberation.	
(Q) COMPOSITION OF GOVERNING BOARDS.—		
Each derivatives clearing organization shall ensure that the composition of the governing board or committee of the derivatives clearing organization includes market participants.	LedgerX ensures that the views of the public and market participants are incorporated into LedgerX’s governance structure. The board is composed of two public directors and LedgerX has incorporated market participants into the governance structure.	Exhibit Q
(R) LEGAL RISK.—		
Each derivatives clearing organization shall have a well-founded, transparent, and enforceable legal framework for each aspect of the activities of the derivatives clearing organization.	<p>LedgerX has established an effective and enforceable legal framework. LedgerX has entered into agreements with outside service providers for the provision of services that are essential to LedgerX’s ability to perform clearing operations in compliance with the CEA and the CFTC’s regulations promulgated thereunder.</p> <p>LedgerX can lawfully enforce the Rules against Participants. Pursuant to Rule 3.2(C), an applicant’s submission of a Participant Application and Agreement to LedgerX constitutes the applicant’s agreement to be bound by the Rules and the published policies of LedgerX. Pursuant to Rule 3.1, each Participant and Authorized User consents to be bound by and comply with the Rules. The Rules constitute a legally binding and enforceable agreement between LedgerX and each Participant.</p>	<p>Exhibit R</p> <p>Participant Application and Agreement</p> <p>Banking agreements</p> <p>Swap data repository agreement</p> <p>LedgerX Rules</p>