

Exhibit A-1
Ownership Information
Quanta Clear, Inc. (the “Applicant” or “Quanta DCO”)

Exhibit A-1		
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	Brief summary of relevant Quanta DCO Rule, Policy or Procedure	Relevant Exhibit(s)
39.10 Compliance		
(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). (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.	Quanta DCO is applying for registration as a derivatives clearing organization (“DCO”) by submitting Form DCO (the “Application”). Once registered, Quanta DCO will comply with the DCO Core Principles (“Core Principles”). As demonstrated in this Application, Quanta DCO has drafted its Rules (Exhibit A-2), Compliance Manual (Exhibit A-11-1), Business Continuity and Disaster Recovery Plan (Exhibit I-2-1), and Enterprise Risk Management Framework (Exhibit A-12-1), and has designed Quanta DCO’s clearing operations to be compliant with the Core Principles and the Commodity Exchange Act, as amended (“CEA”), and other applicable CFTC regulations promulgated thereunder.	This Application, including all exhibits and attachments
39.11 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	Quanta DCO maintains sufficient financial, operational and managerial resources to discharge each responsibility of a DCO. Quanta DCO maintains sufficient financial resources by	Exhibits B-1 (Financial Resources), B-2 (Default Resources), B-3 (Operating Resources) and B-4 (Human Resources)

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).	operating a fully-collateralized DCO and by collecting an appropriate level of fees from Participants for the provision of clearing and settlement services. Quanta DCO’s CFO is engaged with Quanta DCO’s accountants and auditors and possesses knowledge of the CFTC’s financial resources requirements to enable Quanta DCO to satisfy the CFTC’s financial resources requirements. Internal manuals, including the Compliance Manual (Exhibit A-11-1), and financial reporting form templates enable Quanta DCO to effectively report the DCO’s financial resources to the CFTC.	
39.12 Participant and Product Eligibility		
(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. (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. (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.	Quanta DCO has established transparent and objective Participant eligibility criteria that allow for fair and open access to Quanta DCO. The eligibility criteria are disclosed in the Rules (Exhibit A-2), specifically in Chapter 3 of the Rules (Exhibit A-2). All Participants must complete an application process to become a Participant and comply with all Rules (Exhibit A-2) to continue to be a Participant. Any violation of the Rules (Exhibit A-2) could result in a Disciplinary Action against the Participant. Quanta DCO has set forth product eligibility procedures in the Compliance Manual (Exhibit A-11-1).	Exhibits C (Participant and Product Eligibility), C-2-1 (Sample Contract no. 1 to be Listed on Quanta Exchange and Cleared by Quanta DCO) and C-2-2 (Sample Contract no. 2 to be Listed on Quanta Exchange and Cleared by Quanta DCO) Exhibits C-1-1, C-1-2 and C-1-3 (Participant Agreements) Exhibit A-11-1(Compliance Manual) Exhibit A-2 (Quanta DCO Rulebook)

39.13 Risk Management		
(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. (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. (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. (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. (v) REQUIREMENTS REGARDING MODELS AND	Quanta DCO is a fully-collateralized derivatives clearing organization. Accordingly, variation margin calls and related margin methodologies are not necessary. Quanta DCO shall only accept collateral in the form of U.S. dollars. Chapter 7 of the Rulebook (Exhibit A-2) sets forth the full-collateralization requirements to which Participants must adhere, as well as the forms of acceptable collateral Participants may post to the Applicant. Quanta DCO allows FCMs to carry customer accounts, and requires that all FCM customer trading be fully collateralized. Chapter 4 of Quanta DCO’s Rules (Exhibit A-2) sets forth the rules regarding FCMs. Internal procedures for collecting the collateral necessary to fully-collateralize each trade are set forth in the Compliance Manual (Exhibit A-11-1). The Risk Management Policy Manual (Exhibit D-1) thoroughly describes the way in which Quanta DCO will manage its risks, and any potential risks that could threaten the security of Quanta DCO.	Exhibit D (Risk Management) Exhibit D-1 (Risk Management Policy Manual) Exhibit A-11-1 (Compliance Manual) Exhibit A-12-1 (Enterprise Risk Management Framework) Exhibit A-2 (Quanta DCO Rulebook)

PARAMETERS.—Each model and parameter used in setting margin requirements under clause (iv) shall be— (I) risk-based; and (II) reviewed on a regular basis.		
39.14 Settlement Procedures		
Each derivatives clearing organization shall— (i) complete money settlements on a timely basis (but not less frequently than once each business day); (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); (iii) ensure that money settlements are final when effected; (iv) maintain an accurate record of the flow of funds associated with each money settlement; (v) possess the ability to comply with each term and condition of any permitted netting or offset arrangement with any other clearing organization; (vi) regarding physical settlements, establish rules that clearly state each obligation of the derivatives clearing organization with respect to physical deliveries; and (vii) ensure that each risk arising from an obligation described in clause (vi) is identified and managed.	Quanta DCO’s Rulebook (Exhibit A-2) and settlement procedures set forth Quanta DCO’s method of ensuring compliance with Core Principle E. Quanta DCO maintains settlement bank monitoring procedures to ensure the safety and soundness of each of its settlement banks. Quanta DCO does not provide netting arrangements at launch.	Exhibit E (Settlement Procedures) Exhibit A-2 (Quanta DCO Rulebook)
39.15 Treatment of Funds		
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. 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	Chapter 7 of Quanta DCO’s Rulebook (Exhibit A-2) delineates Quanta DCO’s Rules for the safe custody and segregation of Quanta DCO’s customers’ funds, as well as rules for permissible investments. These are also described in the Compliance Manual (Exhibit A-11-1).	Exhibit F (Treatment of Funds) Exhibit A-11-1 (Compliance Manual) Exhibit A-2 Quanta DCO Rulebook)

by the derivatives clearing organization to the assets and funds. *PERMISSIBLE INVESTMENTS.—Funds and assets invested by a derivatives clearing organization shall be held in instruments with minimal credit, market, and liquidity risks.		
39.16 Default Rules and Procedures		
(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. (ii) DEFAULT PROCEDURES.—Each derivatives clearing organization shall—(I) clearly state the default procedures of the derivatives clearing organization; (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.	Quanta DCO operates a fully-collateralized DCO. By requiring the necessary collateral for each trade to be posted with Quanta DCO before trade execution, Quanta DCO ensures that a Participant default would not impact Quanta DCO or other Participants. Chapter 7 details the requirements related to full collateralization and to which all Participants must adhere.	Exhibit G (Default Rules and Procedures) Exhibit A-11-1 (Compliance Manual) Exhibit A-2 (Quanta DCO Rulebook)
39.17 Rule Enforcement		
Each derivatives clearing organization shall— (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; (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	Quanta DCO has the authority and ability to enforce Quanta DCO Rules (Exhibit A-2). Pursuant to Chapter 4 and Rule 3.1, FCMs, Participants and their authorized personnel with access to Quanta DCO consent to and agree to be subject to Quanta DCO’s jurisdiction. Chapter 8 sets forth in a transparent manner the disciplinary procedures to which Quanta DCO	Exhibit H (Rule Enforcement) Exhibit A-11-1 (Compliance Manual) Exhibit A-2 (Quanta DCO Rulebook)

participant of any rule of the derivatives clearing organization; and (iii) report to the Commission regarding rule enforcement activities and sanctions imposed against members and participants as provided in clause (ii).	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.	
39.18 System Safeguards		
Each derivatives clearing organization shall— (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; (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 (iii) periodically conduct tests to verify that the backup resources of the derivatives clearing organization are sufficient to ensure daily processing, clearing, and settlement.	Quanta DCO will maintain a program of risk analysis and oversight using industry best standards. Quanta DCO's program will include planning and protections and planning for information security, business continuity and disaster recovery, capacity and performance, system operations and development, and physical security. Quanta DCO continually monitors for actual or threatened risks. Quanta DCO's technology systems involve a high degree of security to prevent system outages and cyber-attacks. Quanta DCO's compliance team conducts periodic audits to verify the integrity of Quanta DCO's technology systems. As part of its Risk Management Policy Manual (Exhibit A-12-1), Quanta DCO will conduct routine testing of its system safeguards, including vulnerability testing; external penetration testing; internal penetration testing; controls testing; security incident response plan testing; and enterprise technology risk assessment. Quanta DCO has established a Business Continuity and Disaster Recovery Plan (Exhibit I-2-1) that would be activated in the event of an emergency or other circumstances warranting activation of such plan. Rule 2.9 describes the procedures Quanta DCO will follow to declare an emergency.	Exhibit I (System Safeguards) and attachments, including Information Security Policy (Exhibit I-1), Business Continuity and Disaster Recovery Plan (Exhibit I-2-1) and Physical Security and Environmental Controls (Exhibit I-6) Exhibit A-12-1 (Enterprise Risk Management Framework) Exhibit D-1 (Risk Management Policy Manual) Exhibit A-2 (Quanta DCO Rulebook)

	Quanta DCO also requires FCM members to coordinate their business continuity and disaster recovery plans with Quanta DCO.	
39.19 Reporting		
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	Quanta DCO will submit required reports, including daily open interest and other contract-specific information reports, and quarterly and annual financial reports. Quanta DCO's Chief Compliance Officer will submit an annual compliance report as required by CFTC Regulation 39.10(c)(3). Quanta DCO's Compliance Manual (Exhibit A-11-1) sets forth internal procedures for compliance with reporting obligations, and Quanta DCO has templates for various types of reports. Quanta DCO will maintain business records in a form and manner acceptable to the Commission and for a period of no less than 5 years as set forth in Quanta DCO's Rulebook (Exhibit A-2) and Compliance Manual (Exhibit A-11-1) and as described in Exhibit K.	Exhibit J (Reporting) Exhibit A-11-1 (Compliance Manual)
39.20 Recordkeeping		
Each derivatives clearing organization shall maintain records of all activities related to the business of the derivatives clearing organization as a derivatives clearing organization— (i) in a form and manner that is acceptable to the Commission; and (ii) for a period of not less than 5 years.	Quanta DCO will maintain business records in a form and manner acceptable to the Commission and for a period of no less than 5 years as set forth in Quanta DCO's Rulebook (Exhibit A-2) and Compliance Manual (Exhibit A-11-1) and as described in Exhibit K (Recordkeeping).	Exhibit K (Recordkeeping) Exhibit A-11-1 (Compliance Manual) Exhibit A-2 (Quanta DCO Rulebook)
39.21 Public Information		
(i) IN GENERAL.—Each derivatives clearing organization shall provide to market participants	Quanta DCO makes various information public, as required by CFTC regulations. For example,	Exhibit L (Public Information)

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. (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. (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 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.	Quanta DCO’s Rules (Exhibit A-2) are publicly available on Quanta DCO’s website. Quanta DCO’s procedures for making information public are incorporated in the Compliance Manual (Exhibit A-11-1).	Exhibit A-11-1 (Compliance Manual) Exhibit A-2 (Quanta DCO Rulebook)
39.22 Information Sharing		
Each derivatives clearing organization shall— (i) enter into, and abide by the terms of, each appropriate and applicable domestic and international information-sharing agreement; and (ii) use relevant information obtained from each agreement described in clause (i) in carrying out the risk	Quanta DCO will initially be clearing for Quanta Exchange, which is an affiliate entity. Quanta DCO has not entered into information sharing agreements with other clearing houses, exchanges or regulatory agencies. Quanta DCO will enter into domestic and	Exhibit M (Information Sharing) Exhibit A-11-1 (Compliance Manual)

management program of the derivatives clearing organization.	international information-sharing agreements as the CFTC may require from time-to-time.	
39.23 Antitrust Considerations		
Unless necessary or appropriate to achieve the purposes of this Act, a derivatives clearing organization shall not— (i) adopt any rule or take any action that results in any unreasonable restraint of trade; or (ii) impose any material anticompetitive burden.	In line with Quanta DCO's compliance first culture, and as described in Quanta DCO's Compliance Manual (Exhibit A-11-1) and in Exhibit N (Antitrust Considerations), Quanta DCO will not adopt any rule or take any action that results in any unreasonable restraint of trade or impose any material anticompetitive burden.	Exhibit N (Antitrust Considerations) Exhibit A-11-1 (Compliance Manual)
39.24 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. (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.	Chapter 2 of Quanta DCO's Rulebook (Exhibit A-2) delineates Quanta DCO's transparent governance arrangements and fitness standards for directors and committee members. In accordance with Rule 2.2, Quanta DCO's board contains no less than two public directors. In accordance with Rule 2.4, members of Quanta DCO's board each meet the required eligibility and fitness criteria.	Exhibit O (Governance Fitness Standards) Exhibit A-2 (Quanta DCO Rulebook)
39.25 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	Rule 2.10 of Quanta DCO's Rulebook (Exhibit A-2) and Quanta DCO's Compliance Manual (Exhibit A-11-1) establish a method of minimizing and managing conflicts of interest.	Exhibit P (Conflicts of Interest) Exhibit A-11-1 (Compliance Manual) Exhibit A-2 (Quanta DCO Rulebook)

(ii) establish a process for resolving conflicts of interest described in clause (i).		
39.26 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.	The composition of Quanta DCO's governing board includes market participants and individuals who are not executives, officers, or employees of the derivatives clearing organization or an affiliate thereof, as described in Exhibit Q (Composition of Governing Boards).	Exhibit Q (Composition of Governing Boards) Exhibit A-2 (Quanta DCO Rulebook)
39.27 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.	The well-founded, transparent, and enforceable legal framework for each aspect of Quanta DCO's activities are delineated in Quanta DCO's Rulebook (Exhibit A-2), which includes, in Rules 3.1 and 3.2, rules relating to an applicant's acceptance to be bound by Quanta DCO's Rules (Exhibit A-2). Quanta DCO may enter into agreements with outside service providers for the provision of services that are essential to Quanta DCO's ability to perform clearing operations in compliance with the CEA and the CFTC's regulations promulgated thereunder.	Exhibit R (Legal Risk Considerations) Exhibits C-1-1, C-1-2 and C-1-3 (Participant Agreements) Exhibit A-2 (Quanta DCO Rulebook)