

Coinbase Custody custody.coinbase.com 200 Park Ave South Suite 1208 New York, NY 10003

Brent J. Fields Secretary Securities Exchange Commission 100 F Street, N.E. Washington, D.C. 20549-1090

Re: File No. SR-NYSEArca-2019-01: Proposal to List and Trade Shares of the Bitwise Bitcoin ETF Trust Under NYSE Arca Rule 8.201-E

Dear Mr. Fields:

Thank you for the opportunity for Coinbase Custody Trust Company, LLC ("**Coinbase Custody**") to submit this letter in response to the request for public comment by the Securities Exchange Commission (the "**Commission**") regarding a proposal by NYSE Arca, Inc. (the "**Exchange**"). The Exchange proposes to list and trade shares of the Bitwise Bitcoin ETF Trust (the "**Trust**") under NYSE Arca Rule 8.201-E (the "**Proposal**"). We support the Proposal and appreciate the opportunity to provide our views on the custodial aspects of this important issue. Coinbase Custody is a limited purpose trust company organized under the laws of the state of New York and, as such, is authorized to provide non-discretionary fiduciary custodial services to institutional customers throughout the United States.

In this letter, Coinbase Custody seeks to inform the Commission's consideration of the Proposal by confirming that regulated, secure custodial solutions exist in the marketplace to support the Trust's operations. One example is Coinbase Custody.

I. Regulated Custodial Solutions

Starting in late 2013 the New York State Department of Financial Services ("**NYDFS**") began an inquiry into the digital asset industry and, through that process, concluded that there was a need for a robust regulatory framework beyond what was currently in place for money transmitters. This process resulted in a two-track approach to the regulation of digital asset companies in the state of New York. Some entities could pursue the "BitLicense" while others, desiring a more robust regulatory framework based on banking regulations, could seek to form limited purpose trust companies under the NYBL Section 102-a. Since 2014, the NYDFS has chartered four limited purpose trust companies for the purpose of providing non-discretionary fiduciary custody of digital assets. The process for obtaining such a charter can take nearly a year and entails a robust review of the applicant's business model, finances, compliance procedures, customer agreements, and founding member backgrounds. In October 2018, Coinbase Custody obtained its charter, becoming authorized to exercise the powers conferred by Section

100 of the NYBL. Coinbase Custody is subject to the supervision of NYDFS and regulatory obligations similar to that of a New York State chartered bank.

Coinbase Custody operates as a standalone, independently-capitalized trust company and follows a rich history of other New York State trust companies operating under the fiduciary umbrella, such as the Depository Trust Company. New York State trust companies offer services such as employee benefit trust, personal trust, corporate trust, transfer agency, securities clearance, investment management, and custodial services. However, New York state has subjected Coinbase Custody to additional controls tailored to the risks presented by digital asset custody. These added controls include a robust review of Coinbase Custody's wallet environment, capitalization, anti-money laundering procedures, confidentiality, security, and storage architecture for compliance with stringent governance requirements. Furthermore, Coinbase Custody is subject to rigorous reporting and examination requirements by NYDFS.

Coinbase Custody's processes are designed first and foremost to protect and secure client assets. Our internal review is overseen by me, as the company's Chief Executive Officer, as well as Coinbase Custody's Chief Compliance Officer, Chief Information Security Officer, Chief Operating Officer and members of the company's legal team who review all custodied digital assets for adherence to appropriate regulatory and risk criteria. All client digital assets are held in trust for the benefit of clients and are segregated from both (i) the proprietary property of Coinbase Custody and its affiliates, and (ii) the assets of any other Coinbase Custody client. Digital assets held by Coinbase Custody are legally owned by, and held in trust for, clients. In the event of insolvency or bankruptcy of Coinbase Custody, such assets do not become property of the estate, and creditors will have no rights to such assets.

II. Security

Holding digital assets raises unique security challenges: the technology is new, the regulations are not explicit, and the risk is perceived as higher than that of traditional investing. While the crypto market has evolved over more than a decade and now offers dozens of digital assets attractive to professional-grade investors, secure custody continues to be a critical consideration for institutional investment.

Coinbase Custody's cold storage solution uses the same architecture that has underpinned Coinbase Inc.'s custody of \$20+ billion in digital assets for its retail investors over the past 7 years — all without incident. This has been accomplished by continuously improving our security processes and building on best practices across both cyber and physical security.

Specifically, we have built threat models to consider all known attack vectors relevant to the custody of digital assets, including:

- Key generation, storage and restoration (details below)
- Man-in-the-middle attacks
- Customer account take over
- Supply chain risk

- Employee kidnapping and/or collusion
- Disaster recovery
- Physical security
- Emissions security
- Political and regulatory risk

Starting at the beginning, Coinbase Custody uses a proprietary key generation ceremony¹ to generate cold storage addresses for Coinbase Custody wallets. Among other elements, this process leverages a Faraday tent to block electromagnetic signals, factory-sealed laptops with no wireless components, multiple independent sources of randomness, and stringent testing processes to ensure the keys are generated correctly and there is no chance of compromise. In addition, an independent auditor is present for every ceremony.

After key generation, Coinbase Custody uses a geographically distributed network of vaults to store the keys. In doing so Coinbase Custody uses supply chain security best practices and leverages secure processing facilities registered using unaffiliated names. Coinbase Custody's Global Security Operations Center ("**GSOC**") is responsible for continuous physical security and video surveillance feed monitoring of Coinbase offices, key generation sites, and vault locations.

Next, fund withdrawals require universal second factor (U2F) backed authentication and authorizations, video calls to verify identity, Coinbase Custody account manager authorization, and a signed withdrawal form from clients. Additionally, Coinbase Custody requires annual, enhanced background checks for all personnel performing high-trust functions, including processing withdrawals. Multiple levels of technical and protocol based consensus requirements are built into the custodial and cold-storage system to protect against unauthorized withdrawal of assets entrusted to Coinbase Custody.

Finally, on a day-to-day basis, Coinbase Custody employs security best practices to ensure that its services are secured, updates to its primary services do not introduce new vulnerabilities, and new services have been sufficiently analyzed for, and defended against, vulnerabilities and attacks. Coinbase Custody internal systems are audited on a periodic basis to ensure that our security standards are high and to minimize the chance for risk. The Coinbase Custody product, processes and associated cold storage is audited by third party security assessment firms on a quarterly basis.

III. Coinbase Custody Insurance

Coinbase Custody is an industry leader in securing insurance for the custody of digital assets and works to ensure enterprise-grade assurances on investments that

¹See <u>https://www.wired.com/story/coinbase-physical-vault-to-secure-a-virtual-currency/</u>

institutions demand. However, the proliferation of crypto has also meant a proliferation in confusion about how the space is insured. Crypto insurance has remained one of the key barriers to institutional investment in the space until recent years. Coinbase Custody's Chief Information Security Officer works tirelessly to grow the crypto industry's insurance capacity and dispel misinformation.²

Today, Coinbase Custody offers some of the broadest and deepest insurance coverage in the crypto industry under a program Coinbase has run continuously since 2013. Coinbase Custody funds are completely segregated and held exclusively in cold storage, but the insurance program covers both cold and hot storage assets held by Coinbase Custody and its affiliates. This facilitates complete coverage for institutional clients' holdings across Coinbase Custody and its affiliates and products, such as Coinbase Pro.

IV. Compliance, Controls and Audits

Beyond what is legally required of it as a limited purpose trust company, Coinbase Custody has built upon its culture of compliance to establish a comprehensive financial crimes compliance program. Coinbase Custody's compliance team is responsible for the implementation, monitoring, escalation, reporting, and management of all policies related to combating financial crime.

Coinbase Custody's institutional custodial systems are totally separate from all other Coinbase activities. Coinbase Custody wallet addresses are completely segregated per client. Further, Coinbase Custody wallet address are also segregated from all other client wallets and all internal Coinbase wallets. As a result, any transfers (even between Coinbase Custody wallets) will be represented on the public blockchain and will be reflected on Coinbase Custody's internal accounting ledgers.

Coinbase Global, Inc., Coinbase, Inc., Coinbase Custody, and other affiliated entities, including all affiliated international entities (collectively, "**Coinbase**") operate an enterprise-wide risk management framework designed to identify, rate, report and control enterprise risks. Coinbase Custody employs the same framework, and is governed by its Board of Managers, which receives risk and compliance reports on a regular basis. The risk framework is tailored to Coinbase and is modeled on the COSO Enterprise Risk Management — Integrated Framework and places focus on risks that could prevent Coinbase from achieving its strategic, operations, reporting, and compliance business objectives. The framework is designed to identify and evaluate risk through the ongoing assessment of qualitative and quantitative factors including the overall control environment, internal and external audits and assessments, strategic and regulatory change management, industry trends and metrics.

Coinbase Custody is regularly audited by major financial and security audit firms.

² See, e.g., <u>https://blog.coinbase.com/on-insurance-and-cryptocurrency-d6db86ba40bd</u>.

On December 31, 2018, Coinbase Custody certified its SOC 2 Type 1. Included in the SOC 2 coverage are a variety of controls relating to key management, key generation, and the generic security posture of Custody. Coinbase Custody is currently in testing for its SOC 1 Type 2 and SOC 2 Type 2 audits and expects to complete both in 2019.

V. Conclusion

Thank you for the opportunity to comment on the Proposal. If you have any questions on our comment letter, please feel free to contact Dorothy DeWitt, Vice President and General Counsel - Business Lines and Markets at

Sincerely,

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Sam McIngvale Chief Executive Officer Coinbase Custody

CC: Hon. Jay Clayton, Chairman Hon. Robert J. Jackson, Jr., Commissioner Hon. Hester M. Peirce, Commissioner Hon. Elad L. Roisman, Commissioner Brett Redfearn, Director, Division of Trading and Markets Dalia Blass, Director, Division of Investment Management