March 26, 2018

Christopher Kirkpatrick Secretary of the Commission Commodity Futures Trading Commission Three Lafayette Center 1155 21st Street NW Washington, DC 20581

RE: RIN 3038-AE62

Dear Secretary Kirkpatrick:

I have attached 3Degrees comments regarding RIN 3038-AE62. This filing comes after the close of the comment period, therefore we respectfully ask that you use your discretion to introduce them into the official record.

Regards,

Steve Mickelsen

General Counsel and Corporate Secretary

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March 20, 2018

Christopher Kirkpatrick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Center
1155 21st Street NW
Washington, DC 20581

RE: Public Comment on Retail Commodity Transactions Involving Virtual Currency, Proposed Interpretation RIN 3038-AE62

Dear Secretary Kirkpatrick:

3Degrees welcomes the opportunity to provide comments to the Commodity Futures Trading Commission ("CFTC" or Commission") on the Commission's Proposed Interpretation on Retail Commodity Transactions Involving Virtual Currency (the "Interpretation").¹

3Degrees is an industry leading renewable energy and carbon trading and consulting company. It has been named the Environmental Finance REC Trading Company of the Year for four consecutive years.² 3Degrees is exploring blockchain applications in the renewable energy industry. 3Degrees does not engage in virtual currency transactions with retail customers, although it is interested in the fair and efficient operation of commodity markets so that innovators who develop technological solutions are able to provide the maximum benefit from their products to consumers in renewable energy and other industries.

3Degrees commends the Commission for its measured approach to regulating the blockchain industry and implores it to continue regulating with Chairman Giancarlo's adage to "Do No Harm" to blockchain technology while pursuing those who are using that same technology as a vehicle to employ fraudulent schemes.³

¹ Retail Commodity Transactions Involving Virtual Currency, 82 FR 60335 (December 20, 2017).

² "For fourth year, 3Degrees is named Best Trading Company by Environmental Finance" https://3degreesinc.com/best-rec-trading-company-environmental-finance-2018/

^{3 &}quot;"Do no harm" was unquestionably the right approach to development of the Internet. Similarly, I believe that "do no harm" is the right overarching approach for distributed ledger technology." Written Testimony of Chairman J. Christopher Giancarlo before the Senate Banking Committee, Washington, D.C. February 6, 2018.

In the Interpretation, in addition to the specifically enumerated questions the Commission "encourages all comments including background information, actual market examples, best practice principles, expectations for the possible impact on future innovation, and estimates of any asserted costs and expenses." In response to the Commission's request, 3Degrees submits these comments.

3Degrees respectfully recommends that the Commission embody the Chairman's Do No Harm approach by providing market certainty to innovators by providing a clear framework for regulation of virtual currency and other types of blockchain tokens which includes: (1) adopting a policy that commodities will be regulated consistently regardless of the means of transfer or the type of database the commodity is recorded in; (2) virtual currencies should be included within the existing commodities regulatory regime; and if the Commission ever determines that virtual currencies require a distinct regulatory regime, to exempt commodities that are not intended to be a substitute for fiat currency; (3) further defining "virtual currency" to make clear which types of tokens are included in the definition; and (4) continue to work with the Securities Exchange Commission ("SEC") to clarify the regulatory treatment for tokens that contain elements of commodities and securities and how tokens which have changing characteristics are classified.

(1) Consistent Regulation of Commodities Across Technological Platforms

In order to Do No Harm to the underlying technology, 3Degrees recommends that the Commission adopt a policy that a commodity will not be regulated differently by virtue of how it is represented, stored and transferred. Blockchain technology has great promise to enable the efficient creation, transferring, storing and tracking of energy, renewable energy attributes and a host of other tangible and intangible commodities. In the energy industry, there are promising models for blockchain enabled (1) microgrids and (2) energy and energy attribute tracking and transfer.

Microgrids

Microgrids represent newly constructed electrical grids which in some cases are not connected to the main electrical grid and may be geographically isolated from the main grid, or in other cases can be integrated into the existing grid.⁶

https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo37

⁴ Interpretation at 60340.

⁵ Use cases for Blockchain Technology in Energy and Commodity Trading, Price Waterhouse Cooper, available at https://www.pwc.com/gx/en/industries/assets/blockchain-technology-in-energy.pdf.

⁶ See Department of Energy "How Microgrids Work" by Allison Lantero, June 17, 2014. Available at https://www.energy.gov/articles/how-microgrids-work.

In blockchain enabled microgrid projects energy producers, such colloquially as "prosumers" with a rooftop solar array or an interest in an off-site renewable energy project are able to track and transfer electricity to their neighbors who are on the same microgrid. The electricity is represented via a blockchain token which can be tracked and transferred via a smart contract such that if a prosumer's solar array generates more energy than it needs, the token is sold to a different customer on the grid which has not produced as much energy as it needs. The transactions themselves can be automated so that smart meters buy and sell the energy through automated "smart contract" transactions. 8

Energy and Attribute Tracking and Transfer

In addition to opportunities with microgrids, parties are looking into using blockchain technology to more efficiently track and transfer energy on the existing electrical grid. The Report of the Joint Economic Committee Congress of the United States on the 2018 Economic Report of the President (the "Report") described the potential for blockchain applications to aid energy transaction speed and efficient management of the electrical grid to be "truly revolutionary" stating:

"For example, power plants could record the electricity they generate on a blockchain as available for purchase. Utilities could then purchase the power, and the blockchain would record the purchase and the transfer. Finally the meters of end users would communicate with the utility to purchase portions of the power. These steps occur now but using a distributed ledger would streamline and speed up delivery, lowering costs and saving power."

In addition to physical energy, many entities desire to be able to make public claims to the environmental attributes associated with renewable energy consumption. Parties purchase these attributes through agreements for renewable energy certificates ("RECs") in the

⁷ For a discussion of the creation of and types of blockchain tokens, see "A Securities Law Framework for Blockchain Tokens" last updated December 7, 2016 at page 1 stating: "A blockchain token is a digital token created on a blockchain as part of a decentralized software protocol. There are many different types of blockchain tokens, each with varying characteristics and uses. Some blockchain tokens, like Bitcoin, function as a digital currency. Others can represent a right to tangible assets like gold or real estate. Blockchain tokens can also be used in new protocols and networks to create distributed applications. These tokens are sometimes also referred to as App Coins or Protocol Tokens. These types of tokens represent the next phase of innovation in blockchain technology, and the potential for new types of business models that are decentralized for example, cloud computing without Amazon, social networks without Facebook, or online marketplaces without eBay." Available at https://www.coinbase.com/legal/securities-law-framework.pdf

⁸ LO3 Energy in running a well known blockchain enabled microgrid pilot in Brooklyn. https://www.brooklyn.energy/

⁹ See Report of the Joint Economic Committee Congress of the United States on the 2018 Economic Report of the President, page 214. https://www.congress.gov/115/crpt/hrpt596/CRPT-115hrpt596.pdf

United States or Guarantees of Origin ("GOs") in Europe. These intangible commodities have been bought and sold for years OTC and on exchanges. These commodities are capable of physical settlement and have been regulated under the Commodity Exchange Act. There are intriguing blockchain use cases for energy attributes and the potential to incentivize and commoditize additional attributes from environmentally beneficial activities.¹⁰

Energy industry innovators are focusing their early efforts on building a platform to track and transfer the intangible environmental attribute rights associated with renewable energy generation. Transacting in GOs or RECs over a blockchain network has the potential to provide for a more efficient, data rich transfer of rights from the seller to buyer.

These valuable innovations and their progeny will reach their full potential when innovators have clear rules regarding how their innovations will be regulated. As a principle, the Commission should regulate energy and other commodities consistently across all different transactional platforms, technologies and databases.

(2) Fit Virtual Currencies Into the Existing Commodities Regulatory Regime

Although blockchain technology is being applied in novel ways in the commodities industry, the tokens created via blockchain technology are merely the digital representations of contractual rights. These digital commodities can and should be fit into the existing commodities regime without creating new regulatory categories which would be time consuming and potentially carry unintended consequences.

Presently, the Commission does not utilize a different regulatory regime for virtual currencies vis-à-vis other commodities. 3Degrees believes that is the proper approach. In the event the Commission chooses to regulate virtual currencies as a distinct commodity, 3Degrees recommends that the Commission define virtual currency in a manner that includes commodities seeking to mimic the attributes of fiat currency and excludes commodities that do not seek to mimic the attributes of fiat currency. This approach would ensure that blockchain tokens which digitally transfer rights to non-currency like commodities will be able to be created, tracked and transferred in a manner that is consistent with how they are currently exchanged over non-blockchain networks.

The existing commodities regulatory regime has the potential to protect customers from fraud and manipulation in the virtual currency markets just as it has for consumers in traditional commodity markets. 3Degrees supports utilizing the existing commodities regime to virtual currency and other blockchain token oversight.

¹⁰ Parte Finale: The Energy Tokens by Sebnem Rusitschka discussing energy store, energy share, and energy save tokens. https://medium.com/@sebnem/parte-finale-the-energy-tokens-5b5f7c4fdacd

(3) Further Definition of Virtual Currency

The first step for any orderly regulatory regime is a well-defined focus for the regime. Toward this end, 3Degrees respectfully recommends that the Commission further define "Virtual Currency" using the same process it used to further defined "Swap" and other consequential definitions in its Dodd-Frank rulemakings. Through its swap definition rulemakings the Commission provided parties certainty that intangible commodities, such as RECs and emissions allowances, when properly constructed are capable of being physically settled and therefore eligible for the forward contract exemption from the Swaps definition. This certainty provided additional certainty to innovators fueling the renewable energy boom in the United States. Providing similar certainty regarding the virtual currency definition would help to fuel blockchain innovations.

There are several different virtual currency definitions and the lack of certainty regarding what is and is not a virtual currency makes it more difficult for parties to achieve regulatory certainty.

In the Interpretation, the Commission states:

"The Commission interprets the term virtual currency broadly. In the context of this interpretation, virtual or digital currency: Encompasses any digital representation of value (a "digital asset") that functions as a medium of exchange, and any other digital unit of account that is used as a form of a currency (i.e., transferred from one party to another as a medium of exchange); may be manifested through units, tokens, or coins, among other things; and may be distributed by way of digital "smart contracts," among other structures." 12

For the purposes of the Interpretation, the Commission focuses on virtual currency as a medium of exchange or unit of account.

In The Matter of Coinflip d/b/a Derivabit, and Francisco Riordan ("Coinflip") the Commission defined "virtual currency," as

"a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value, but does not have legal tender status in any jurisdiction. Bitcoin and other virtual currencies are distinct from "real" currencies, which are the coin and paper money of the United States or another country that are designated as legal tender, circulate, and are customarily used and accepted as a

12 Interpretation at 60338

 $^{^{11}}$ "The intangible nature of environmental, or other, commodities does not disqualify contracts based on such commodities from the forward exclusion from the swap definition, notwithstanding that the core of the forward exclusion is intent to deliver the underlying commodity." 77 Fed. Reg. 156 at 48233 (August 13, 2012).

medium of exchange in the country of issuance." [underline added]¹³

The Coinflip definition includes "stores of value" as a potential type of virtual currency.

In CFTC vs. Patrick McDonnell and Cabbagetech, Corp. d/b/a Coin Drop Markets ("Coin Drop"), the court described attributes of virtual currency and referenced a general definition of virtual currency, however it never actually defined the term virtual currency.¹⁴

Additionally, at times the SEC and Commission have used various pseudonyms when describing virtual currencies. At the live February 6th hearing, various tokens were described as "pure cryptocurrency" and "cryptocurrency." In its complaint against *My Big Coin*, the Commission described the *My Big Coin* token as a "fully functional virtual currency." Virtual currency has been defined in the CFTC's regulatory orders, however the various virtual currency qualifiers and pseudonyms have not been defined, so their use adds to confusion of what tokens are virtual currencies and which ones are not.

The definition of virtual currency is the key building block upon which any virtual currency regulations would be based, therefore further defining virtual currency to provide parties guidance on whether the token they have produced is in-fact a virtual currency and not subject to the various pseudonyms and qualifiers for the term. The definition the Commission promulgated in *Coinflip* appears to be the oldest commodities focused definition and consistent with the usage of the term to date. That definition would provide a useful definition to promulgate via the rulemaking process. ¹⁶

3Degrees recommends that if the Commission undertakes further defining virtual currency it consider the extent to which a token is able to be used for its intended purpose at the time of evaluation as the dividing line between a token meeting the virtual currency definition and one which does not. Under such a definition, a token which is able to be presently consumed for its intended purpose would be a virtual currency. Tokens not meeting the virtual currency definition at a given time would not be virtual currencies.

Additionally, 3Degrees recommends that token which merely seek to provide for

¹³ See Coinflip footnote 2 at page 2.

https://www.cftc.gov/sites/default/files/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliprorder09172015.pdf

¹⁴ Available at

 $[\]frac{https://www.cftc.gov/sites/default/files/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoindropordero30618.pdf$

¹⁵ At 1

https://www.cftc.gov/sites/default/files/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfmybigcoinpaycomplt011618.pdf

¹⁶ In *Coin Drop* the court stated "Full deference is dependent on whether the agency's interpretations followed a formal rulemaking process. [citing CFTV v. Sterling Trading Group, Inc. 605 F. Supp. 2d 1245, 1265-1266 (S.D. Fla. 2009)" Coindrop at 16.

consumption of the token without mimicking the attributes of fiat currency be identified as being outside of the virtual currency definition. This would make clear that a token for which there is not a present use would not be able to avail itself of the regulatory treatment under the CEA. In many cases these tokens would be securities.

Providing innovators clarity so that they can structure products to comply with a harmonized regulatory regime will provide a great assist to ensuring that blockchain technology reaches its potential. The first step to achieving regulatory certainty to innovators producing blockchain products is to clearly define what is and is not a virtual currency.

(4) Clarify Token Treatment With The SEC

Due to the nature of blockchain technology and virtual currency, presently there are many different federal and state regulatory agencies that regulate different parts of token transactions. These agencies include the Commission, SEC, Treasury, FTC, IRS and a host of state and international agencies. These overlapping jurisdictions make it difficult for parties to clearly identify which regulatory regime(s) they are under at a given time, which is a deterrent to innovators who do not want to bear regulatory uncertainty risk. The Report states:

"Regulatory agencies will need to coordinate to ensure they do not work at cross purposes. America is already subject to a complex set of regulatory institutions governing financial products and transactions. As Perianne Boring of the Chamber of Digital Commerce highlighted, this regulatory web produced four different classifications of digital assets (commodity, security, currency, and property), which is not conducive to an environment where entrepreneurs are enthusiastic about launching a startup." ¹⁷

The Commission is well positioned to lead in this area by helping to coordinate with other regulators to increase regulatory certainty. The Commission has a history of working with the SEC regarding hybrid products similar to virtual currencies. The agencies' history of working together includes their joint report on OTC Derivatives Markets and the Commodity Exchange Act, ¹⁸ the Shad-Johnson Jurisdictional Accord and amendments

¹⁷ Report at 225.

¹⁸ Over-the-Counter Derivatives Market and the Commodity Exchange Act Report of The President's Workign Group on Financial Markets dated November 1999, available at https://www.treasury.gov/resource-center/fin-mkts/Documents/otcact.pdf.

thereto, ¹⁹ the hybrid instrument exemption, ²⁰ regulatory harmonization, ²¹ security futures products, ²² and the Dodd-Frank rulemakings delineating jurisdiction for swaps and security-based swaps. ²³

The agencies also have a history of working together when hybrid products evolve over time. In a 2013 regulatory proceeding Eurex Deutschland ("Eurex") was marketing a securities futures index.²⁴ Initially, Eurex's index was a broad based securities index, putting it exclusively under Commission jurisdiction. Over time, the weighting of the various stocks in the index shifted. The result of this weighting shift was that "the Index transitioned from a broadbased to a narrow-based security index, and futures on the Index became subject to joint [SEC] and [CFTC] jurisdiction."²⁵ The shifting composition of the index and the agencies' shifting of their respective jurisdictional responsibilities response provides a laudable model for proactively dividing and sharing jurisdiction for virtual currencies and other blockchain tokens.

3Degrees encourages the Commission to work with its fellow federal regulators, especially the SEC to enact a regulatory regime which accounts for the hybrid nature of certain virtual currencies which at the outset may implicate multiple agency jurisdictions and which may evolve from a product not meeting the definition of a virtual currency to a virtual currency or other commodity over time. This effort would decrease the regulatory uncertainty risk that innovators are currently required to bear and help to unlock the "truly revolutionary" potential for blockchain which is described in the Report.

Conclusion

3Degrees commends the Commission for proactively soliciting comments regarding its

25 21(a) Report at page 3.

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¹⁹ CFTC and SEC Issues Related to the Shad-Johnson Jurisdictional Accord, dated April 2000. Available at https://www.gao.gov/new.items/gg00089.pdf

²⁰ 17 CFR 34.3. For a description of how the hybrid exemption may interact with token offerings, see "A hybrid approach to token sales?" by Conor O'Hanlon. Available at

https://medium.com/@conorohanlon/a-hybrid-approach-to-token-sales-coo1481ef775.

²¹ A Joint Report of the SEC and the CFTC on Harmonization of Regulation, dated October 19, 2009. Available at

 $[\]frac{https://www.cftc.gov/sites/default/files/idc/groups/public/@otherif/documents/ifdocs/opacftc-secfinaljointreport101.pdf}{}$

²² Securities Futures Products Regulations and Requirements, available at

 $[\]frac{https://www.cftc.gov/IndustryOversight/ContractsProducts/SecurityFuturesProduct/sfpregulationsrequirements.html}{}$

²³ Further Definition of "Swap," "Security-Based Swap," and "Security-Based Swap Agreement"; Mixed Swaps; Security-Based Swap Agreement Recordkeeping; Final Rule; 77 Fed. Reg. No 156, 48208 (August 13, 2012).

²⁴ Securities and Exchange Commission Release No. 70148, August 8, 2013. Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: Eurex Deutschland (("Eurex 21(a) Report))" available at https://www.sec.gov/litigation/investreport/34-70148.pdf

virtual currency regulatory interpretations and plans. The Do No Harm approach articulated by Chairman Giancarlo is the proper approach to achieve the benefits of blockchain technology while protecting consumers from potential harm from nefarious actors who wish to use a powerful technology to commit common fraud.

In order to enact the Do No Harm structure, 3Degrees respectfully recommends that the Commission (1) adopt a policy that commodities will be regulated consistently regardless of the means of transfer or the type of database the commodity is recorded in; (2) include virtual currencies within the existing commodities regulatory regime; and if the Commission ever determines that virtual currencies require a distinct regulatory regime, to exempt commodities that are not intended to be a substitute for fiat currency; (3) further define "virtual currency" to make clear which types of tokens are included in the definition; and (4) continue to work with the SEC to clarify the regulatory treatment for tokens that contain elements of commodities and securities and how tokens which have changing characteristics are covered.

Please feel free to reach out to 3Degrees regarding this or any issue relating to blockchain tokens.

Regards,

Steve Mickelsen

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