SECURITIES AND EXCHANGE COMMISSION (Release No. 34-93840; File No. SR-NYSEArca-2021-67)

December 21, 2021

Self-Regulatory Organizations; NYSE Arca, Inc.; Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to List and Trade Shares of the One River Carbon Neutral Bitcoin Trust under NYSE Arca Rule 8.201-E

On September 20, 2021, NYSE Arca, Inc. ("NYSE Arca" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to list and trade shares ("Shares") of the One River Carbon Neutral Bitcoin Trust ("Trust") under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares). The proposed rule change was published for comment in the Federal Register on October 5, 2021.<sup>3</sup>

On November 10, 2021, pursuant to Section 19(b)(2) of the Act,<sup>4</sup> the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.<sup>5</sup> This order institutes proceedings under Section 19(b)(2)(B) of the Act<sup>6</sup> to determine whether to approve or disapprove the proposed rule change.

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>2</sup> 17 CFR 240.19b-4.

See Securities Exchange Act Release No. 93171 (Sept. 29, 2021), 86 FR 55073 ("Notice"). Comments on the proposed rule change can be found at: <a href="https://www.sec.gov/comments/sr-nysearca-2021-67/srnysearca-202167.htm">https://www.sec.gov/comments/sr-nysearca-2021-67/srnysearca-202167.htm</a>.

<sup>&</sup>lt;sup>4</sup> 15 U.S.C. 78s(b)(2).

See Securities Exchange Act Release No. 93553, 86 FR 64276 (Nov. 17, 2021). The Commission designated January 3, 2022, as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule change.

<sup>&</sup>lt;sup>6</sup> 15 U.S.C. 78s(b)(2)(B).

### I. <u>Summary of the Proposal</u>

As described in more detail in the Notice,<sup>7</sup> the Exchange proposes to list and trade the Shares of the Trust under NYSE Arca Rule 8.201-E, which governs the listing and trading of Commodity-Based Trust Shares on the Exchange.

The investment objective of the Trust is to track the performance of bitcoin, as measured by the performance of the MVIS One River Carbon Neutral Bitcoin Index ("Index"), adjusted for the Trust's expenses and other liabilities. As discussed further below, the Index is designed to reflect the performance of bitcoin in U.S. dollars on a carbon neutral basis. In seeking to achieve its investment objective, the Trust will hold bitcoin and will value its Shares based on the same methodology used to calculate the Index, as adjusted to reflect the expenses associated with offsetting carbon credits. The Trust will not purchase or sell bitcoin directly, although the Trust may direct the Custodian to sell or transfer bitcoin to pay certain expenses. The Trust will not hold cash or cash equivalents; however, there may be situations where the Trust will hold cash on a temporary basis. The Fund will not hold futures, options, or options on futures.

<sup>&</sup>lt;sup>7</sup> <u>See Notice, supra note 3.</u>

See id. at 55073. The sponsor of the Trust is One River Digital Asset Management, LLC ("Sponsor"), a Delaware limited liability company and a wholly-owned subsidiary of One River Asset Management, LLC. The trustee for the Trust is Delaware Trust Company. The marketing agent for the Trust is Foreside Global Services, LLC. The Bank of New York Mellon ("BNY Mellon") will act as the Trust's administrator and transfer agent. The custodian for the Trust, Coinbase Custody Trust Company, LLC ("Custodian"), will hold all of the Trust's bitcoin on the Trust's behalf and will retain custody of the Trust's bitcoin in an account for the Trust ("Bitcoin Account"). See id.

<sup>&</sup>lt;sup>9</sup> <u>See id.</u> at 55074.

See id.

See id. The Trust has entered into a cash custody agreement with BNY Mellon under which BNY Mellon will act as custodian of the Trust's cash and cash equivalents. See id.

See id.

The Trust intends to offset the carbon footprint associated with bitcoin once a quarter by paying for the instantaneous retirement of voluntary carbon credits equal to the daily estimated carbon emissions associated with the bitcoins held by the Trust.<sup>13</sup> According to the Exchange, voluntary carbon credits are certified and standardized under the Verra Verified Carbon Standard ("Verra"), an organization that establishes and manages standards and programs in connection with voluntary carbon credits, and the Trust will only utilize carbon credits that meet the Verra standards.<sup>14</sup> The Trust has entered into an agreement with LIRDES S.A., d/b/a Moss Earth ("Moss"), a company located in Uruguay, to pay for carbon credit tokens created by Moss ("MCO2 Tokens") representing certified reductions in greenhouse gas emissions.<sup>15</sup> The MCO2 Tokens issued by Moss are carbon offsets encrypted and tokenized utilizing blockchain technology and are stored on a registry managed by Verra.<sup>16</sup> The Trust will purchase MCO2 Tokens from Moss at the end of March, June, September, and December at pre-negotiated prices, and Moss will instantaneously retire the tokens to the Ethereum blockchain.<sup>17</sup> The number of

<sup>&</sup>lt;sup>13</sup> See id. at 55073, 55074.

<sup>&</sup>lt;sup>14</sup> See id. at 55074-75.

See id. at 55075. Upon expiration of its agreement with Moss in April 2031, the Trust will either enter into a replacement agreement, or alternatively pay for the retirement of MCO2 Tokens or similar carbon credits at then current spot prices for such instruments. See id.

See id. According to the Exchange, the MCO2 Token is a digital representation of a carbon credit that is stored on a registry by Verra and can be acquired in over-the-counter or publicly-traded markets. Moss purchases carbon credits from projects that are certified under Verra's Verified Carbon Standard. Each circulating MCO2 Token is intended to represent a claim on a certified carbon credit held in an aggregated pool of carbon credits within the Moss account on the Verra registry. Tokenized carbon credits are fungible and do not represent a claim on a specific underlying carbon credit issued to a specific carbon reduction project. See id.

<sup>&</sup>lt;sup>17</sup> See id. at 55075 & n.10.

MCO2 Tokens paid for by the Trust will equal the aggregated sum of offsets implied by the daily carbon emissions for a single bitcoin over the preceding quarter multiplied by the average number of bitcoins held in the Trust's portfolio during the quarter, with a view towards tracking the carbon footprint offset estimate calculated by the Index. The Trust does not hold the carbon offset MCO2 Tokens as an asset. Instead, the Trust pays for the MCO2 Tokens carbon offsets from Moss, who then instantaneously retires the tokens to the Ethereum blockchain, to reduce global carbon emissions by the carbon dioxide tonnage (or tonnage of other similar greenhouse gases) corresponding to such tokens. <sup>19</sup>

The Index value is the benchmark value of the bitcoin less the estimated daily cost of offsetting the carbon emissions of a single bitcoin.<sup>20</sup> The Index is constructed using bitcoin price feeds from eligible bitcoin spot markets and volume weighted median price average, calculated over 20 intervals in rolling three-minute increments, less the estimated cost of offsetting the daily carbon emissions attributable to each bitcoin in the network.<sup>21</sup>

The cost of the carbon offset used in the Index is calculated in the following steps. First, electricity consumption for the bitcoin mining network is recorded daily. Second, geolocation of bitcoin miners identifies the location of electricity usage. Third, for each location, the average

<sup>&</sup>lt;sup>18</sup> See id. at 55075.

<sup>&</sup>lt;sup>19</sup> See id. at 55075 & n.10.

See id. at 55075. The Index methodology was developed by MV Index Solutions GmbH ("MVIS") and is monitored by the One River Index Committee, an independent, third-party calculation agent for the Index. MVIS, with the assistance of its affiliates, is also the calculation agent for the Index and for the MVIS® CryptoCompare Bitcoin Benchmark Rate ("BBR"), which measures the value of the underlying bitcoin represented by, and is the bitcoin benchmark component for, the Index. The current constituent bitcoin platforms of the BBR are Coinbase, Gemini, Bitstamp, Kraken, and itBit. See id. at 55074-75.

See id.

production of electricity by its source of production (e.g., solar, coal) is recorded. This estimates the carbon emission intensity of electricity consumption in the bitcoin network. Fourth, total electricity consumption is multiplied by the carbon intensity of the bitcoin network to estimate total carbon emissions. These steps allow MVIS to obtain a daily estimate of the carbon emissions necessary to run the bitcoin network. The total carbon emissions of the bitcoin network are divided by the total number of bitcoins in circulation to estimate the carbon emissions attributable to each bitcoin on each day. Finally, the carbon emission attributable to each bitcoin is multiplied by the MCO2 Token market price of a carbon offset.<sup>22</sup> The daily accumulation of the carbon offset component of the Index measures the totality of the cost of the carbon offset required for holding a single bitcoin over the accumulation period.<sup>23</sup>

BNY Mellon will calculate the net asset value ("NAV") of the Trust once each Exchange trading day. The NAV for a normal trading day will be released after 4:00 p.m. E.T. (often by 5:30 p.m. E.T. and almost always by 8:00 p.m. E.T.). The NAV per Share of the Trust will be equal to the median price of the bitcoin used in the calculation of the Index less the Trust's liabilities, including the cost of carbon measured in the Index, divided by the total number of outstanding Shares. The accumulation of the daily carbon offset costs calculated in the Index act as an expense to the Trust. The payment for the retirement of carbon offsets by the Trust will occur once per quarter of the calendar year, and the number of MCO2 Tokens retired will equal

See id. at 55074.

<sup>&</sup>lt;sup>23</sup> See id. at 55075.

See id. at 55076-77.

the aggregated sum of offsets implied by the daily carbon footprint for each bitcoin held by the Trust during the quarter. The NAV will accrue the estimated carbon cost daily.<sup>25</sup>

The Trust will provide website disclosure of its bitcoin holdings daily. <sup>26</sup> The Intraday Indicative Value ("IIV") per Share will be widely disseminated every 15 seconds during the NYSE Arca Core Trading Session (normally 9:30 a.m. E.T. to 4:00 p.m. E.T.) by the Trust and by one or more major market data vendors, and will be available through on-line information services. The IIV will be calculated by using the prior day's closing NAV per Share of the Trust as a base and updating that value throughout the trading day to reflect changes in the most recently reported price level of the Index as reported by Bloomberg, L.P. or another reporting service. <sup>27</sup>

The Trust will process all creations and redemptions in-kind and only in one or more blocks of 50,000 Shares ("Baskets"). <sup>28</sup> When creating Shares, authorized participants will deliver, or facilitate the delivery of, bitcoin to the Bitcoin Account in exchange for Shares, and when redeeming Shares, the Trust, through the Custodian, will deliver bitcoin to authorized participants. Although the Trust will create Baskets only upon the receipt of bitcoins, and will redeem Baskets only by distributing bitcoins, a separate cash exchange process will be made available to authorized participants. Under the cash exchange process, an authorized participant may deposit cash with BNY Mellon, which will facilitate the purchase or sale of bitcoins through a liquidity provider ("Liquidity Provider") on behalf of an authorized participant. The bitcoin

<sup>&</sup>lt;sup>25</sup> See id. at 55076.

See id. at 55082.

<sup>&</sup>lt;sup>27</sup> See id. at 55077.

<sup>&</sup>lt;sup>28</sup> See id. at 55074; 55077

purchased (or sold) by the Liquidity Provider in connection with the cash exchange process will, in turn, be delivered to (or from, as appropriate) the Custodian, on behalf of the Trust, in exchange for Baskets.<sup>29</sup>

# II. <u>Proceedings to Determine Whether to Approve or Disapprove SR-NYSEArca-2021-67</u> and Grounds for Disapproval under Consideration

The Commission is instituting proceedings pursuant to Section 19(b)(2)(B) of the Act<sup>30</sup> to determine whether the proposed rule change should be approved or disapproved. Institution of proceedings is appropriate at this time in view of the legal and policy issues raised by the proposed rule change, as discussed below. Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, as described below, the Commission seeks and encourages interested persons to provide comments on the proposed rule change.

Pursuant to Section 19(b)(2)(B) of the Act,<sup>31</sup> the Commission is providing notice of the grounds for disapproval under consideration. The Commission is instituting proceedings to allow for additional analysis of the proposed rule change's consistency with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national securities exchange be "designed to prevent fraudulent and manipulative acts and practices" and "to protect investors and the public interest."<sup>32</sup>

See id. at 55074.

<sup>&</sup>lt;sup>30</sup> 15 U.S.C. 78s(b)(2)(B).

<sup>31 &</sup>lt;u>Id.</u>

<sup>&</sup>lt;sup>32</sup> 15 U.S.C. 78f(b)(5).

The Commission asks that commenters address the sufficiency of the Exchange's statements in support of the proposal, which are set forth in the Notice, <sup>33</sup> in addition to any other comments they may wish to submit about the proposed rule change. In particular, the Commission seeks comment on the following questions and asks commenters to submit data where appropriate to support their views:

- 1. What are commenters' views on whether the proposed Trust and Shares would be susceptible to manipulation? What are commenters' views generally on whether the Exchange's proposal is designed to prevent fraudulent and manipulative acts and practices? What are commenters' views generally with respect to the liquidity and transparency of the bitcoin markets, the bitcoin markets' susceptibility to manipulation, and thus the suitability of bitcoin as an underlying asset for an exchange-traded product?
- 2. The Exchange asserts that "[a]longside the growth in users, active wallets and market capitalization, institutional ratings of various [digital assets] have increased substantially" and "[b]itcoin ranks as one of the most widely used, if not the most widely used, [digital asset] in the global [digital asset] market."<sup>34</sup> According to the Exchange, the bitcoin "marketplace is maturing with increased institutional participation" and the "rise in the digital economy has led to an increase in activity within the regulated banking system, reflecting increased institutional demand."<sup>35</sup> The Exchange also asserts that "licensed and regulated service providers have emerged to provide fund custodial services for digital assets, among other services." The Exchange concludes that "[t]hese are substantial developments since the Commission last

See Notice, supra note 3.

See id. at 55078.

See id.

reviewed a bitcoin [exchange-traded product] proposal."<sup>36</sup> Do commenters agree or disagree with these assertions? Are the changes that the Exchange identifies sufficient to support the determination that the proposal to list and trade the Shares is designed to protect investors and the public interest and is consistent with the other applicable requirements of Section 6(b)(5) of the Act?

- 3. The Exchange states certain "regulatory and enforcement actions acknowledge the increasing use of bitcoin and other [digital assets] within the broader global financial sector generally, and represent ongoing efforts to regularize the use of such [digital assets] within existing regulatory frameworks."<sup>37</sup> The Exchange also asserts that "[t]echnological advancements on the bitcoin protocol are also progressing and will broaden institutional adoption of the bitcoin protocol as a technology" and that there "have also been advancements in regulatory frameworks, both on a global and national scale, on [digital asset] exposures."<sup>38</sup> The Exchange concludes that its proposal is "aimed at financial stability, protecting consumers, and promoting innovation in the payments system."<sup>39</sup> What are commenters' views regarding the Exchange's assertions?
- 4. The Exchange asserts that the use of the Index "eliminates those bitcoin spot markets with indicia of suspicious, fake, or non-economic volume from the NAV calculation methodology" and the Index's use of multiple bitcoin spot markets mitigates "the potential for idiosyncratic market risk, as the failure of any individual bitcoin spot market should not

See id.

See id. at 55079.

See id.

<sup>&</sup>lt;sup>39</sup> See id. at 55080.

materially impact pricing for the Trust."<sup>40</sup> In addition, the Exchange states that the Index's use of median prices "limits the ability of outlier prices, which may have been caused by attempts to manipulate the price on a particular market, to impact the NAV and that "[a]ny attempt to manipulate the NAV would require a substantial amount of capital distributed across a majority of the eligible spot markets, and potentially coordinated activity across those markets, making it more difficult to conduct, profit from, or avoid the detection of market manipulation."<sup>41</sup> What are commenters' views regarding these assertions?

- 5. The Exchange argues that because the Trust will process all creations and redemptions in in-kind transactions with authorized participants, the "Trust is uniquely protected against potential attempts by bad actors to manipulate the price of bitcoin on sport markets contributing to the Index and thereby the Trust's NAV calculation."<sup>42</sup> Do commenters agree with the Exchange's analysis and conclusion?
- 6. What are commenters' views generally with respect to the Trust's investment objectives? What are commenter's view regarding how the Trust intends to meet its investment objectives? Specifically, the Exchange states that "[i]n establishing the Index, MVIS and the Sponsor created a robust, transparent process for quantifying the carbon footprint of bitcoin in a clear, repeatable manner."

  The Exchange also states that "the creation of the Index and tokenization of the carbon offsets will provide additional transparency to investors with respect to the NAV of the Trust vis-à-vis the estimated carbon footprint of the bitcoin retired by the Trust, and will thus

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see id. at 55080.

See id.

See id.

<sup>43 &</sup>lt;u>See id. at 55074.</u>

give investors an opportunity to independently monitor the Trust's efforts to offset the carbon emissions associated with its bitcoin holdings."<sup>44</sup> What are commenters' views about the Exchange's assertions?

7. Has the Exchange described the Trust in sufficient detail to support the finding that the proposal is consistent with the Exchange Act, including the requirement that it be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest? For example, according to the Exchange, the investment objective of the Trust is to track the performance of bitcoin, as measured by the Index, which represents the daily value of bitcoin less the estimated daily cost of offsetting carbon emission of a single bitcoin based on the MCO2 Token *market price*. The Exchange, however, also states that the Trust will purchase MCO2 Tokens on a *quarterly* basis at *pre-negotiated prices*. <sup>45</sup> Given that the Trust will purchase and retire MCO2 Tokens on a quarterly basis, has the Exchange provided sufficient information regarding how the Trust will calculate its NAV daily, how its daily NAV calculations will relate to the Trust's quarterly settlements, or how the Share prices may be impacted by either the daily or quarterly accounting and any MCO2 Token price differentials between them? Moreover, according to the Exchange, the Trust will purchase the MCO2 Tokens at pre-negotiated prices but provides no further information regarding the price of MCO2 Tokens or carbon credits generally. The Exchange also contemplates that MCO2 Tokens may not be available in some circumstances and that the agreement with Moss will expire in 2023. Given that carbon mitigation is a key characteristic of the Trust and that both the Trust's daily NAV calculations

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<sup>44 &</sup>lt;u>See id. at 55076.</u>

See id. at 55075.

and quarterly settlements incorporate costs of MCO2 Tokens, is the information the Exchange provides sufficient to support the finding that the proposal is consistent with the Exchange Act?

## III. Procedure: Request for Written Comments

The Commission requests that interested persons provide written submissions of their views, data, and arguments with respect to the issues identified above, as well as any other concerns they may have with the proposal. In particular, the Commission invites the written views of interested persons concerning whether the proposal is consistent with Section 6(b)(5) or any other provision of the Act, and the rules and regulations thereunder. Although there do not appear to be any issues relevant to approval or disapproval that would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 19b-4, any request for an opportunity to make an oral presentation.<sup>46</sup>

Interested persons are invited to submit written data, views, and arguments regarding whether the proposal should be approved or disapproved by [insert date 21 days from publication in the <u>Federal Register</u>]. Any person who wishes to file a rebuttal to any other person's submission must file that rebuttal by [insert date 35 days from publication in the <u>Federal Register</u>].

Comments may be submitted by any of the following methods:

### Electronic comments:

• Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or

Section 19(b)(2) of the Act, as amended by the Securities Act Amendments of 1975, Pub. L. 94-29 (June 4, 1975), grants the Commission flexibility to determine what type of proceeding—either oral or notice and opportunity for written comments—is appropriate for consideration of a particular proposal by a self-regulatory organization. See Securities Act Amendments of 1975, Senate Comm. on Banking, Housing & Urban Affairs, S. Rep. No. 75, 94th Cong., 1st Sess. 30 (1975).

• Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-NYSEArca-2021-67 on the subject line.

### Paper comments:

 Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-NYSEArca-2021-67. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<a href="http://www.sec.gov/rules/sro.shtml">http://www.sec.gov/rules/sro.shtml</a>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All

submissions should refer to File Number SR-NYSEArca-2021-67 and should be submitted by [insert date 21 days from date of publication in the <u>Federal Register</u>]. Rebuttal comments should be submitted by [insert date 35 days from date of publication in the <u>Federal Register</u>].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.  $^{47}$ 

J. Matthew DeLesDernier Assistant Secretary

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<sup>&</sup>lt;sup>47</sup> 17 CFR 200.30-3(a)(57).