

Lisa J. Stevenson, Acting General Counsel
Office of the General Counsel
Federal Election Commission
1050 First Street NE
Washington, DC 20463

December 11, 2018

RE: Advisory Opinion Request 2018-13 (OsiaNetwork LLC)

Dear Ms. Stevenson,

On October 5, 2018, we wrote to ask the FEC to deny the above-captioned request of OsiaNetwork LLC. We now write in support of the FEC’s November 13, 2018 draft opinion rejecting that request, but with some requested modifications.

I. The Draft Opinion Correctly Rejects OsiaNetwork’s Claim that Automated Cryptocurrency Mining is “Volunteering.”

We commend your staff for seeing through the ruse by which OsiaNetwork seeks to reframe automated cryptocurrency mining as “volunteering.” As we noted in our earlier comment, the “volunteer” exception is for volunteer services provided *to the campaign*, such as making phone calls, communicating with voters, and so forth—not “volunteering” to obtain economically valuable commodities, cash-equivalent resources, or currency, and then donate them to the campaign without being subject to any contribution limits.

In its December 4, 2018 response, OsiaNetwork argues that the text of the “volunteer” exception in the Federal Election Campaign Act does not support the FEC’s draft opinion. That exception provides: “The term ‘contribution’ does not include—(i) the value of services provided without compensation by any individual who volunteers on behalf of a candidate or political committee.” 52 U.S.C. § 30101(8)(B)(i). Implicit in the phrase “individual who volunteers” is that the *individual* (not her computers) are doing the volunteering. Indeed, the very next subparagraph addresses the use of the individual’s *property*, exempting “the use of . . . personal property . . . voluntarily provided by an individual to any candidate or any political committee of a political party in rendering voluntary personal services on the individual’s residential premises . . . for candidate-related or political party-related activities, to the extent that the cumulative value . . . does not exceed \$1,000 with respect to any single election, and on behalf of all political committees of a political party does not exceed \$2,000 in any calendar year.” *Id.* § 30101(8)(B)(ii).

This statutory distinction between the individual's *time*, which is fully exempted, from the individual's *personal property*, which is only partially exempted, was discussed in *Buckley v. Valeo*:

If, as we have held, the basic contribution limitations are constitutionally valid, then surely these provisions are a constitutionally acceptable accommodation of Congress' valid interest in encouraging citizen participation in political campaigns while continuing to guard against the corrupting potential of large financial contributions to candidates.

Buckley v. Valeo, 424 U.S. 1, 36 (1976) (per curiam). In other words, Congress treated the volunteer's donation of her time as "citizen participation in political campaigns," which is of the highest order of First Amendment activity, but the donation of her personal property as part of those efforts as a financial benefit, which is appropriately limited due to "the corrupting potential of large financial contributions to candidates."

Fundamentally, OsiaNetwork is mischaracterizing the cryptocurrency mining as an activity undertaken by the "volunteer." But the owner of the loaned computing capacity is not performing volunteer services; rather, their computers are doing so. The volunteer exception applies to services provided "by" the "individual who volunteers." 52 U.S.C. § 30101(8)(B)(i). And when people volunteer, certain implicit limits apply. Even a "full-time volunteer" who works no other job and has no other personal or family responsibilities must sleep. And absent human cloning, a human volunteer cannot simply buy or rent another copy, or ten copies, or thousand copies of herself; the same is not true of computers. While OsiaNetwork implies that its users will be home users connecting a single desktop or laptop computer to its service, nothing in its proposal requires this.

A wealthy individual could buy ten, or one hundred, or one thousand computers. Alternatively, she could rent the equivalent in cloud computing capacity. For example, at today's pricing, a single Amazon Web Services t3.nano spot instance running Linux can be leased for \$0.0016/hour.¹ With some easily developed scripting, this instance could mine cryptocurrency all 8,760 hours per year for a cost of \$14.02 per year—and a wealthy individual could rent 1,000 instances for \$14,020

¹ See Amazon EC2 Spot Instances Pricing, <https://aws.amazon.com/ec2/spot/pricing/> (visited Dec. 11, 2018). Even the more expensive "on-demand" instance would cost \$0.0052/hour, or \$45.55 per year. See Amazon EC2 Pricing, <https://aws.amazon.com/ec2/pricing/on-demand/> (visited Dec. 11, 2018).

per year, or 100,000 instances for \$1.4 million per year, all “volunteering” to mine cryptocurrency via OsiaNetwork.²

Given fluctuating cryptocurrency prices, such operations may or may not result in a large positive yield. But even if it results in a *negative* yield—that is, the donor spends more on the computing capacity than is generated in cryptocurrency—it is still contribution rather than volunteering. Some wealthy donors devise elaborate means (sometimes lawful, sometimes not) to work around FECA’s contribution limits. Consider a donor who wishes to contribute far more than \$2,700 to a federal candidate. If that donor spends \$500,000 on computing capacity to generate \$490,000 worth of cryptocurrency, from a cryptocurrency economics perspective the investment was a loss. But under OsiaNetwork’s proposal, the \$490,000 could then be transferred to a political candidate under the rubric of “volunteering” and exempt from federal contribution limits. That scenario presents the same risk of corruption (including quid pro quo corruption) and its appearance as if the donor simply wrote a \$490,000 check; the \$10,000 cryptocurrency “loss” is simply the cost of doing business to use OsiaNetwork’s service to circumvent federal contribution limits. The point here is simply that the FEC should resist OsiaNetwork’s efforts to portray this as limited to an individual’s single home computer, when nothing in its proposal forecloses the use of massive computing capacity.

OsiaNetwork similarly misconstrues the “Internet activities” exception at 11 C.F.R. § 100.94, which exempts an individual’s “uncompensated personal services” and her “use of equipment or services for uncompensated Internet activities” from the definition of “contribution.” “Internet activities” are defined with a non-exclusive list of activities that either directly involve communication and similar core First Amendment activity (e.g., “Sending or forwarding electronic messages; providing a hyperlink or other direct access to another person’s Web site; blogging”), or closely facilitate such activity (e.g., not only “creating” a web site, but also “maintaining, or hosting” such a site). Of note, use of computers to generate money—e.g., through automated stock trading, or selling pharmaceutical products online—are not included, even if they happen to use the Internet. Indeed, while OsiaNetwork’s service uses the Internet, it is not an “Internet activity” in any meaningful sense. It so happens that OsiaNetwork uses the public Internet, as opposed to any other network, to connect to its users’ computers, but the mere fact that a computer transaction happens to use the Internet rather than another communications protocol does not make it an “Internet activity” of the type contemplated by the regulation.

² This would not be the most efficient way to mine cryptocurrency; commercial mining is generally done with machines designed specifically for this purpose. But someone who mines cryptocurrency via specialized equipment and then donates the resulting cryptocurrency to a political committee is making a contribution, whereas here, OsiaNetwork claims that the donor would be “volunteering.”

The draft opinion correctly concludes that OsiaNetwork’s proposal results in a contribution from the service’s users, and to the extent of any excess over FECA’s per-donor contribution limits, the remainder is a contribution (and not necessarily a lawful one) from OsiaNetwork LLC.

II. The FEC Should Modify the Draft Opinion to Correctly Value the Contribution as the Value of Dollars Contributed.

The draft opinion proposes (p.10) that the OsiaNetwork’s contribution should be valued at “the usual and normal charge for the computing services used.” However, the proper valuation of the contribution is the actual amount of U.S. currency transferred from OsiaNetwork to the political committee and attributable to that user.

The FEC’s proposed valuation, while well-intentioned, has two major flaws.

1. *Spread between mining cost and value of asset.* The “mining” analogy highlights an aspect of the economics of cryptocurrency: like a commodity natural resource with a fluctuating price, such as oil or natural gas, at various times and places the cost of extraction may be below, equal to, or above the market price of the commodity. Depending on the current cost of the computing services (such as computers and electricity) and the often extremely volatile prices of the cryptocurrency, sometimes mining will be highly profitable (with rewards well above the costs of extraction) and sometimes it will not. If the average cost of extraction is exactly equivalent to the value of the cryptocurrency generated for a lengthy period of time, then this factor may not matter. But if the value of the cryptocurrency asset generated exceeds the cost of computation, then there is no logical reason to use the lower value (based on computing services) rather than the actual value of the asset which is ultimately given the political committee.

An example may help illustrate this point. At a recent snapshot in time, the average cost of mining one Bitcoin varied internationally (based largely on electricity prices) from a low of \$531 in Venezuela to a high of \$26,170 in South Korea.³ Meanwhile, in the morning eastern time on December 11, 2018, the 24-hour average Bitcoin value in dollars was \$3,406.⁴ Suppose a U.S. citizen rents or buys a computer or multiple computers in Venezuela and uses OsiaNetwork’s service to generate exactly one

³ Aaron Hankin, Marketwatch, *Here’s how much it costs to mine a single bitcoin in your country*, May 11, 2018, <https://on.mktw.net/2pPkn5X>.

⁴ <https://blockonomi.com/bitcoin-price/> (visited Dec. 11, 2018, 10:15am EST). This example uses non-matching dates, but the larger conceptual point remains even as the numbers change day to day or moment to moment.

Bitcoin for a political contribution, using computing services that cost \$531. And then suppose that OsiaNetwork converts that Bitcoin to \$3,504.78, deducts its processing fee, and transfers well over \$3,000 to a political committee.

By any reasonable measure, the committee has just received a contribution of over \$3,000. The committee's dollar accounts have increased by over \$3,000; it now has over \$3,000 to spend that it previously did not; the risk of corruption that this \$3,000+ presents is the risk of a \$3,000+ contribution. To value this contribution at \$531 would make no sense.⁵ While this example uses comparative international costs, the fundamental point is broadly applicable: depending on time, location, and many other factors, cryptocurrency mining costs may often be well below the value of the cryptocurrency tokens generated. Valuing the contribution as "services" is inappropriate; rather, it should be valued based on the ultimate dollar contribution.

2. Difficulty in valuing computing services used. In some cases, this may be quite simple; if a donor rents 1000 computers (or the equivalent in cloud computing services) at market prices from a third party for the purpose of connecting them to OsiaNetwork's service, there will be a clear third-party charge. But for donors who use computers that they own, or have access to at no charge, and do not customarily rent their computers out to third parties at commercial rates, then it may be difficult to calculate the "usual and normal charge" for such computing services. Indeed, even for a sophisticated user, a key component of cryptocurrency mining costs is electricity usage; in markets where electricity rates fluctuate, it may be difficult to calculate the value of electricity where mining occurred over a period of days or weeks. It is not clear whether the draft opinion contemplates OsiaNetwork calculating this for each donor or the donors calculating it themselves, but either way, it may be highly impractical.

In contrast, when OsiaNetwork transfers U.S. dollars to the political committee, its valuation is precise and clear. There are calculations involved in properly attributing and allocating the contribution among the donors, but those are problems of dividing a known dollar sum, not a problem of calculating that sum in the first place.

⁵ Conversely, if a donor for some reason used South Korea-based infrastructure to connect to OsiaNetwork's service, it would not make sense to value the contribution at \$26,170 (the donor's cost) when the committee received less than \$3,500. The wasted money spent on electricity in South Korea is of no value to a U.S. political committee. In practice, of course, this scenario would be unlikely.

III. The FEC Should Modify the Draft Opinion to Explicitly Describe OsiaNetwork's Reporting Obligations to Committees.

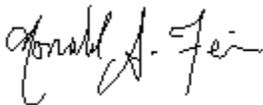
The draft opinion implies, but does not explicitly state, certain reporting obligations from OsiaNetwork to political committees. These obligations should be made more explicit. For the funds transferred that represent contributions from OsiaNetwork's users, OsiaNetwork must report to the recipient committee information sufficient for the committee to be able to fulfill its own obligations. Thus, OsiaNetwork must collect and report to the committee, along with each contribution and its per-donor attribution, each donor's name, mailing address, occupation, and the name of his or her employer. This will enable the committee to itself report the contribution, *see* 11 C.F.R. § 104.8(a), and also to match the donor in its database to ensure that it has not received excessive aggregate contributions from the same donor, e.g., if a donor used the services of both OsiaNetwork and a potential competitor to OsiaNetwork, and/or also made a direct cash donation. For this reason, OsiaNetwork must report this information to the committee even for contributions below \$200.

IV. The FEC Should Modify the Draft Opinion to Explicitly Note that Both OsiaNetwork and Recipient Political Committees Bear the Risk of Unlawful Contributions.

The draft opinion correctly notes (p.14) that OsiaNetwork's service may not be used by prohibited contributors, e.g., foreign nationals, federal contractors, or (with certain exceptions) those using corporate or labor union resources. The opinion should more explicitly note that *both* OsiaNetwork *and* the recipient political committee bear the legal risk if the service is used by prohibited sources to make unlawful contributions. This will help spur best practices for ensuring that prohibited sources do not use the service to evade contribution prohibitions.

Thank you for considering these comments on this advisory opinion.

Sincerely,



Ronald A. Fein
Legal Director, Free Speech For People