

June 2nd, 2022.

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NYSERDA,

Re: Draft Scoping Plan Comments – the rising tide of Cryptocurrency mining at New York’s Fossil- fuel Power Plants and its possible impact on Environmental Justice and BIPOC¹ Communities

Further to my earlier written comments dated April 12th, 2022, I wish to make some further comments to the draft scoping plan on the issue of cryptocurrency mining (‘crypto mining’). A careful perusal of the scoping plan shows that it makes no reference to crypto mining at all! In recent articles and publications², there appears to be some consensus that New York is fast becoming a growing Crypto mining capital of the world or, at least, fast gaining ascendancy in the Crypto-world. This ascendancy in crypto mining would have a considerable impact on New York’s energy demands and on the electricity grid, which is also tasked with the demands of transitioning to renewable/clean energy sources and meeting the resulting increased demand for electricity. In light of this, it would be necessary for the Climate Action Council (‘the Council’) to reflect on the draft scoping plan’s ‘Sector strategies’ classification and adjust them to include strategies for dealing with increased GHG emissions and increased demands on the electric grid, which is bound to occur due to on-going crypto mining, which activities are likely to increase substantially in the near future. This would be helpful to New York as it strives to meet its climate mandate under the CLCPA³. I note that the New York State Senate has today given final approval for a 2 year moratorium on crypto mining using fossil fuel for their mining activities. This represents a temporary solution to the environmental and climate change concerns surrounding crypto mining, thereby making its inclusion in the scoping plan’s “Sector Strategies” and “Statewide and Cross-Sector Policies” all the more critical and needful as a long term solution to the crypto mining environmental concerns⁴.

¹ The draft Scoping plan (for example, see page 5 and 32) makes reference to ‘Disadvantaged Communities’, Environmental Justice Communities (EJ) and Black, Indigenous and People of Color (BIPOC), low-and moderate-income communities, frontline communities but for purposes clarity, convenience and consistency, the term “EJ/BIPOC Communities” would be used in this writeup instead of term “Disadvantaged Communities”.

² <https://www.nytimes.com/2021/12/05/nyregion/bitcoin-mining-upstate-new-york.html> (last accessed 06/01/2022); <https://todaynews.cyou/is-new-york-becoming-the-new-crypto-capital-41876.html> (last accessed 05/30/2022); <https://www.theblockcrypto.com/post/145169/the-crypto-industry-mobilizes-in-new-york-over-mining-moratorium> (last accessed 05/30/2022).

³ Climate Leadership and Community Protection Act, §2, Chapter 106 of the Laws of 2019.

⁴ <https://spectrumlocalnews.com/nys/central-ny/politics/2022/06/02/senate-revives--expected-to-pass-cryptomining-moratorium-in-final-hours> (last accessed 06/03/2022)

Crypto mining, as the Council is well aware, is the operation of specialized computer equipment for the primary purpose of adding, securing, or verifying transactions to a blockchain or mining one or more blockchain-based cryptocurrencies such as Bitcoin⁵. With the advent of digital currency and its rising use, there is an increase in crypto mining, an activity that requires the high use of electricity resulting in the increased production of GHG emissions from power plants involved in crypto mining, which contributes substantially to climate change. Unless this activity is carefully examined and provided for in the ‘key sector strategies’ and ‘statewide and cross-sector policies’ referred to in the scoping plan, crypto mining would, undoubtedly, negatively impact on the prospects of attaining New York’s climate mandate. Unfortunately, nothing in the ‘Sector strategies’ or ‘Statewide and cross-sector policies’ articulated in the scoping plan, being the areas where our emissions reduction efforts are targeted, makes any reference to crypto mining.

GHG emissions resulting from the energy intensive crypto mining activities are in tension with the CLCPA, which is aimed at reducing New York State’s GHG emissions, by 85 percent relative to its 1990 GHG emissions level, by 2050. For example, the Greenidge Generation LLC’s power plant in Finger Lakes⁶ uses behind-the-meter energy for crypto mining. This could serve as a precedent for other power plants seeking to engage in crypto mining to increase their profit margins. Furthermore, there is the problem of the Proof of Work (PoW) crypto mining method used for validating transactions, which is an energy-intensive activity and most of the energy generated and used for the PoW method is fossil fuel-based. Fossil fuel-based PoW crypto mining is extremely polluting unless it uses 100% renewable energy. Also, in some instances, noise pollution, which negatively impacts public health and the right to a healthful environment, as enshrined in New York State Constitution’s Bill of Rights⁷, occurs when the power plant and the modules, which emits sounds from fans to keep the machines cool, can be heard at adjoining properties and interferes with their lawful, reasonable and peaceful enjoyment by neighbors, negatively impacting young children. The environmental impacts therefore affects us all, particularly EJ/BIPOC and low-income communities, where these fossil fuel power plants are predominantly located. These communities have been disproportionately affected by ongoing and legacy pollution, bearing more than their fair share of the State’s energy burden.

The Greenidge power plant, earlier referred to above, is a prime example of a natural gas-fired power plant also serving as a crypto mining facility. It is, without question, a case in point and symptomatic of what happens and would happen if there are no ‘key sector strategies’ in the scoping plan to deal with crypto mining. Greenidge started out as a coal-fired power plant and then transformed itself into a natural gas power plant and is now seeking to transform itself into a dual natural gas power and crypto mining plant. This highlights the contention over the future of digital currencies in New York and the potential rise in crypto mining activities in New York, which would make New York a leading State for crypto mining in the country – considering other

⁵ <https://www.lawinsider.com/dictionary/cryptocurrency-mining> (last accessed 06/01/2022)

⁶ <https://greenidge.com/> (accessed 05/30/2022); See also <https://www.oconnellelectric.com/projects/greenidge-power-plant/> (last accessed 06/01/2022)

⁷ N.Y. Const., Art. 1, Sec. 19

enabling factors such as an abundance of abandoned/disused industrial buildings and readily available cheap electricity. Which makes New York State a fertile ground for crypto mining companies. Of course, increased crypto mining would mean increased pollution and increased health care risks for EJ/BIPOC communities where these power plants are predominantly located.

The fierce competition by crypto miners around the world to resolve complex calculations that validate transactions for a fee, that is PoW, is inextricably linked to the more computing power a crypto miner has. Consequently, more computing power would mean more fees. This necessitates the use of more electricity, resulting in more pollution by fossil-fuel plants generating electricity for the crypto mining operations. As such, New York's prospects of meeting its ambitious GHG emissions reduction targets will be substantially diminished by adding crypto mining to the increased demand for and reliance on electricity for heating and transportation, as envisaged in the relevant Sector Strategies of the scoping plan (and a much larger grid would therefore be required to meet the demands outlined in the 'Key Sector Strategies' of the draft scoping plan and crypto mining).

Turning again to the Greenidge example referred to above, its crypto mining activities has increased the amount of pollution it releases into the air⁸ and the water it collects from the lake (as part of its plants cooling system) and releases back at a higher temperature, into a trout stream, is likely to impact negatively on water quality and the marine ecosystem⁹.

There is, therefore, no dispute that PoW crypto blockchain technology is the most energy intensive system of transaction validation used by cryptocurrencies, most notably bitcoin. Consequently, incorporating PoW crypto mining that utilizes fossil fuels in the scoping plan's Sector strategies on electricity and/or Industry and/or local government key sectors and/or statewide and cross-sector policies is critical if the State is to meet its climate mandate under the Climate Act. In light of this, I respectfully invite the Council to develop appropriate key sector strategies that relate to crypto mining particularly the aspect of mining operations that use PoW as a method of verifying and tracking the creation of new cryptocurrencies and transactions, which are energy intensive activities. This can be done through the imposition of special requirements in an application for new permits or permit renewals for fossil fuel-based PoW crypto mining and requiring the DEC to conduct a detailed environmental review of power plants involved in crypto mining. Furthermore, the permit process or a special permit process should allow for the voices and concerns of impacted EJ/BIPOC communities to be heard and their concerns taken into account (including concerns about siting and mitigation measures) in deciding whether to grant a special permit and, if so, on what conditions, to ensure that

⁸ Ibid at footnote 6; See *Sierra Club v Town of Torrey* 2022 NY Slip Op 22132 Decided on April 7, 2022 Supreme Court, Yates County, Doyle, J. <https://weny.images.worldnow.com/library/d029ed30-959e-4bc2-b944-49e580f70ae0.pdf> (last accessed 06/02/2022); See also <https://www.politico.com/news/2022/05/19/cryptocurrency-mining-blossoms-in-upstate-new-york-but-it-hasnt-been-well-received-00033354> (last accessed 06/01/2022).

⁹ *Town of Torrey*, *supra* at footnote 8: A Petition by environmental groups to stop to, amongst other reliefs sought, the crypto mining operations of Greenidge due to environmental concerns has been unsuccessful due in part to a finding by the court that the Petitioners lack standing to bring the suit.

environmental justice and climate justice are achieved for these already overburdened communities and ensure that all efforts are made to facilitate their effective and meaningful participation in the process. Also, the 'Key Sector Strategies' or 'Statewide and cross-sector policies' of the draft scoping plan should ensure that steps are taken to monitor the increase air pollution at these EJ/BIPOC communities, where there are clusters of power plants undertaking crypto mining, by implementing local community air and sound monitoring programs/controls at these sites. These measures, in my humble opinion, would ensure environmental and climate justice for EJ/BIPOC power plant hosting communities.

Finally, I commend the Council for its diligent efforts in seeking to finalize the draft scoping plan, including its public hearing sessions. These public hearings have been informative and helpful to all stakeholders, particularly EJ/BIPOC communities, who have and still bear the disproportionate burdens of climate change, pollution and energy poverty, and these burdens would be increased if the issue of crypto mining is not effectively provided for within the scoping plan's 'Sector strategy', grid resilience and 'Statewide and Cross-Sector Policies'.

Thank you for giving me the opportunity to comment on the draft scoping plan.

Respectfully,

Teraine Okpoko, Esq.

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