Subject: File No. SR-NYSEArca-2021-037 From: SAM AHN

<u>This is my 19^h comment on bitcoin. All my writings on bitcoin, including this, are about intrinsic</u> value. My previous comments can be found at these links:

Link 1: https://www.sec.gov/comments/sr-cboebzx-2018-040/srcboebzx2018040-4206251-172835.htm Link 2: https://www.sec.gov/comments/sr-nysearca-2017-139/nysearca2017139-4221685-172898.htm Link 3: https://www.sec.gov/comments/sr-cboebzx-2018-001/cboebzx2018001-4226785-172988.htm Link 4: https://www.sec.gov/comments/sr-nysearca-2018-02/nysearca201802-4240462-173003.pdf Link 5: https://www.sec.gov/comments/sr-cboebzx-2018-040/srcboebzx2018040-4274529-173133.pdf Link 6: https://www.sec.gov/comments/sr-cboebzx-2018-040/srcboebzx2018040-4530331-176071.pdf Link 7: https://www.sec.gov/comments/sr-cboebzx-2018-001/cboebzx2018001-4581773-176242.pdf Link 8: https://www.sec.gov/comments/sr-cboebzx-2019-004/srcboebzx2019004-4934624-178449.pdf Link 9: https://www.sec.gov/comments/sr-cboebzx-2019-004/srcboebzx2019004-5180412-183546.pdf Link 10: https://www.sec.gov/comments/sr-cboebzx-2019-004/srcboebzx2019004-5318047-183890.pdf Link 11: https://www.sec.gov/comments/sr-nysearca-2019-01/srnysearca201901-5524009-185228.pdf Link 12: https://www.sec.gov/comments/sr-nysearca-2019-01/srnysearca201901-5706832-185947.pdf Link 13: https://www.sec.gov/comments/sr-nysearca-2019-01/srnysearca-201901-5717064-186027.pdf Link 14: https://www.sec.gov/comments/sr-nysearca-2019-39/srnysearca201939-5810618-187451.pdf Link 15: https://www.sec.gov/comments/sr-cboebzx-2021-019/srcboebzx2021019-8652267-231475.pdf Link 16: https://www.sec.gov/comments/sr-cboebzx-2021-024/srcboebzx2021024-8664058-235363.pdf Link 17: https://www.sec.gov/comments/sr-cboebzx-2021-029/srcboebzx2021029-8732324-237081.pdf Line 18: https://www.sec.gov/comments/sr-nysearca-2021-31/srnysearca-202131-8861698-240078.pdf

What triggered this writing is Quote 1 below, which is in Page 23 of Link 19:

Link 19: https://www.sec.gov/rules/sro/nysearca/2021/34-91962.pdf

(Quote 1) New bitcoin[s] are created and rewarded to the parties providing the Bitcoin Network's infrastructure ("miners") in exchange for their <u>expending computational power</u> to verify transactions and add them to the Blockchain.

The red part in Quote 1 lacks readability for two reasons. First, the verb "expend' and the object "computational power" are linked clumsily. Second, the phrase "computational power" fails to convey what is really happening at a bitcoin mining site.

In general, "computational power" means computing power.

Link 20: https://dictionary.reverso.net/english-cobuild/computational+power

Let me change the red part of Quote 1 to "expending computing power." We can find the meaning of computing power at Link 21.

Link 21: <u>https://encyclopedia2.thefreedictionary.com/computing+power</u>

Definition of "computing power": "the number of operations that a computer can carry out in one (1) second."

If somebody tells us "expend on computing power," it means "spend money for better computers." But If is said, without a preposition like "on" there, "expend computing power," we cannot easily figure out true meaning of it. It sounds like we ought to waste computers, but does it make any sense?

By googling "expend computing power," we find that this three -word expression is being used in bitcoin mining industry only and nowhere else. We can find the meaning of it at Link 22:.

Link 22: https://www.kellogg.northwestern.edu/faculty/georgiadis/Slides_Contests.pdf

Finally, we find that "expending computing power" means in fact "expending electricity." Therefore, the red part in Quote 1 above means spending electricity.

By spending electricity, according to Quote 1 above, what the miners do is (1) verifying transactions and (2) adding the verified transaction to the Blockchain. Two deeds are simply a process of proving "We have done it." Nothing is created: no utility, no fun, no culture, no nothing. Only input, no output.

Imagine a facility with a robot named Sisyphus 1, whose motion is programmed to roll a big stone upward on a slope and release the stone at the top of the slope. When the stone has rolled back down to the original location, Sisyphus 1 will repeat the same job.

Along the path of Sisyphus 1, there are white pebbles randomly embedded in the floor of the slope. If he happens to step, while pushing the stone upslope and without looking down at his feet, on 16 of the white pebbles consecutively, he will be awarded 6.25 bitcoins. After one game and before the next game, the white pebbles get instantly re-set.

There are about ten thousand competitor robots, named Sisyphus 2, Sisyphus 3...Sisyphus 10,000, etc. each in a similar facility. The fasted one will be given said award. A new game starts about every ten minutes. If the fastest robot achieves the task, for example, in nine minutes only, the next game requires 17 white pebbles to be stepped on by the next winner. This is a typical negative-sum game, running on waste of resources.

Exchange facilities look like providing zero-sum games. For the industries, however, it has productive function: allocation of more opportunities to more productive businesses. This function goes out of order if too many meme stocks dance too wildly.

No meme stock in history was ever wasteful like bitcoin industry. The destructive effect of bitcoin is comparable to wars only. Losers suffer more than winners get. The expression "expending computational power" in Quote 1, intended or not, camouflages this fact.