

I'd like to greet you all and inform that i'm a dude who doesn't have enough knowledge to correctly understand how the casper cbc algorithm comes to a conclusion of state, and i dont hang around in ethereum research to understand the correct format of writing these "topics".

However, i like thinking about game theory and trying to figure out ways to accomplish a certain equilibrium point of node distribution. Reason i am here, posting, is; i think i came up with a probably not an implementable idea, that would help reduce the chances of %51 attack happening and increasing the number of "small eth staked nodes".

To my understanding, staking works in a way giving power to stake holders, proportionally to the number of eth one has staked. As in someone staking 32 eth has 32Power, someone staking 100 eth has 100Power.

Having a power function somewhat like this(below) might make it harder to accomplish a %51 attack, and incentivize the small eth staker(which probably are the guys who'll act honest).

$$\text{Power} = \text{numberOfEthStaked} + (1/\text{numberOfEthStaked})$$

This function is pretty close to a flat line, so must be adjusted, but i'm not good at math to calculate a proper function takes all eth at existence into account.