I see this CIP was withdrawn. I think that means it should be updated with a withdrawal-reason

, per CIPs/cips/cip-1.md at main · celestiaorg/CIPs · GitHub ?

Re the DoS attacks described, we are already using Prepare/Process proposal, so we could additionally execute the txs there and set the gas limit for the block based on the actual gas used during execution. Is this what's considered too complicated as per https://github.com/celestiaorg/celestia-app/pull/2887#issuecomment-1881566122 or was there something else? I would expect this to be relatively straightforward but maybe introduce some additional expense/latency into block production.

As for gas metering during the refund and this attack:

an attacker may be able to craft a transaction that performs a large amount of computation while executing the unspent gas refund posthandler

Do you have an example of how this would occur? I would have expected this computation to be quite simple, and the cost to be priced into the base gas costs for txs, so not something an attacker could exploit, but I might be missing something.

One thing to note about gas refunds is that they may make the system more susceptible to mis priced gas costs, vs being required to pay the whole fee. Fortunately I imagine Celestias gas pricing is relatively simple, though it does inherit elements from other modules (eg. bank, staking, ibc) so it might be worth reviewing relative gas costs across the whole app if we're going to reconsider doing the refund.