# EOS Argentina - Feedback on The EOS Resource Model Proposal

## Comments on the pricing function

In the proposal, the price as a function of utilization *u* is

*p(u) = min_price + (max_price - min_price) * (u ^ (exponent - 1.0))*

where *min_price, max_price* and *exponent* are configurable parameters, and *u* goes from 0 to 1.

Our concern is that this function does not seem to be sufficiently justified.
In particular, we believe there should not be a maximum price. As in RAM pricing, by using a proper function the price may go from zero to infinity.

The main problem associated with imposing a maximum price is that nobody knows how the market will behave in the future. If we attempt to solve this by setting a very high maximum, then we are prone to suffer inefficiency in a normal case scenario, unless the *exponent* parameter is too high. But if *exponent* is too high, then the price will be almost equal to *min_price* for a very long *u* interval. The latter situation means that in a low demand scenario, the price is being directly imposed by a parameter instead of letting the market find the price.

A possible solution to this issue is to use instead a function more similar to the functions typically used in automated market makers. For example:

*p(u) = K1 / (1 - u)^2  -  K2*

Where *K1 - K2* will be equal to *min_price*, and *C = 100K1 - K2* will be the price at *u = 0.9*. Thus, we are proposing only two configurable parameters like *min_price* and *C*. Alternatively, the exponent 2 may be another number larger than 1, and possibly configurable as well.

**Further comment**

- It sounds reasonable to use *min_price = 0* for CPU.
- *min_price > 0* for NET might be useful to disincentive large data transactions, therefore reducing the costs of storing the blockchain history. The sustainability of storing the full history is necessarily conditioned to a sufficient decrease of storage costs over time. Still it might be the case that a careful increase in the cost of NET can be beneficial for the network.

The above observations lead us to think that it might not be a good idea to have the same parameters for both CPU and NET.