

One has:

$$\Delta LCOE(a) = \frac{LCOE(a)}{LCOE_0}$$

We assume that the following formula holds:

$$LCOE(a) = \frac{Costs(a)}{AEP(a)} = \frac{CAPEX(a) + OPEX(a)}{AEP(a)}$$

Then, one has:

$$\Delta LCOE(a) = \frac{\frac{Costs(a)}{Costs_0}}{\frac{AEP(a)}{AEP_0}} = \frac{\Delta Costs(a)}{\Delta AEP(a)}$$

If we expand $\Delta Costs(a)$, we obtain:

$$\Delta Costs(a) = \frac{CAPEX(a)}{Costs_0} + \frac{OPEX(a)}{Costs_0} \neq \Delta CAPEX(a) + \Delta OPEX(a)$$

Therefore, the proposed formula for $\Delta LCOE$ is not valid

$$\Delta LCOE(a) \neq \frac{\Delta CAPEX(a) + \Delta OPEX(a)}{\Delta AEP(a)}$$