Interactive comment on “Projections of the Affluent Natural Energy (ANE) for the Brazilian electricity sector based on RCP 4.5 and RCP 8.5 scenarios of IPCC-AR5” by C. da Silva Silveira et al.

Anonymous Referee #1

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This paper proposes to project the natural monthly water inflow to the 203 hydropower production schemes of the Brazilian National Interconnected System (including 97% of the Brazilian electricity production). The monthly inflows are simulated for 21 basins via a hydrologic model (SMAP) driven with monthly precipitation and potential evaporation estimates; for the remaining 182 basins, the monthly inflow is obtained via linear regression on the simulated 21 time series.

The topic as such (projection of streamflow for hydropower production) would be suitable for HESS. Being a scientific journal in the field of hydrology and earth system
sciences, the paper, and in particular its rather crude simulation method, can however not be considered suitable for publication. In fact, such an extremely simplified streamflow simulation method (direct use of global climate model output, linear regression between streamflow series) cannot be deemed useful to project climate change impacts.