Erratum 1 from the author Lindecker Patrick 6th of September 2024
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Two main modifications have been introduced to the "Proposal of a Deuterium-Deuterium fusion reactor intended for a large power plant" article.

About the reactivities
Reactivities were inaccurate. In the figure 1 below, more accurate reactivities are taken into account.

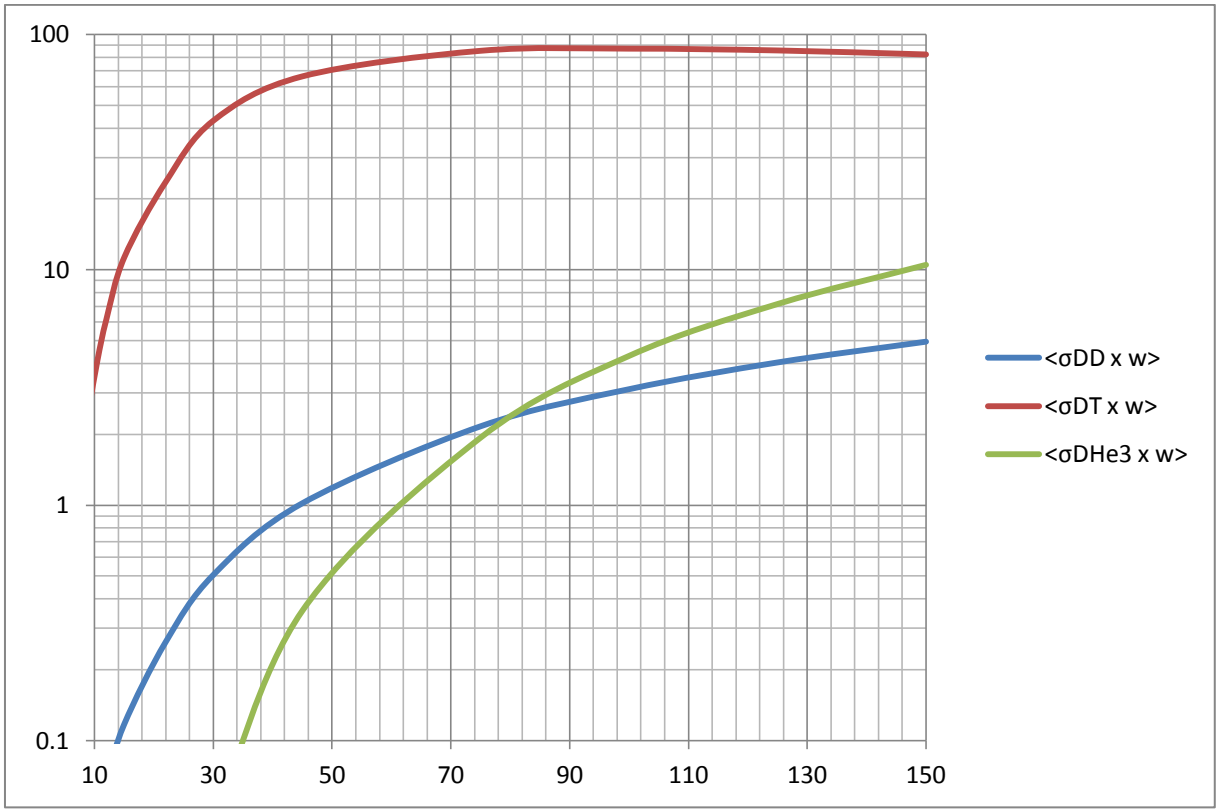

Figure 1. Reactivities of the D-D / D-T / D-He3 fusions.
The abscissa is the equilibrium plasma energy (E_equi=Ecom) in keV and the ordinate is the reactivity in m^3/s x 1E-23

About charge exchanges between ions and gas neutrals
It was supposed permanent losses by charge exchanges on neutrals. This behavior exists at the beginning of operation but disappears progressively as the fusion reactor wall is not in contact with gas, so charge exchanges will not be considered. Consequently, the variables $\gamma cep = \gamma ceT = \gamma ceHe3 = \gamma ceHe4 = \gamma ceD$ are forced to 0.

Results and conclusion

For a fusion radius of 4.5 m, the results are the following:

- Kovrizhnikh scaling: nD=15E19, E_inj=610 keV, E_equi=114 keV, Q=1.80
- Bohm scaling: nD=18E19, E_inj=380 keV, E_equi=91 keV, Q=1.64

These low mechanical gains Q greatly limit the advantage of this type of D-D reactor. The modified executable program with its Delphi 6 source can be downloaded from this direct link: http://f6cte.free.fr/D_D_reactor_model_V_1_1.zip or on the Zenodo WEB open repository, by searching with the title of this article.