Ch 31/32 HW Quiz #1B

A possible reaction that can occur in a nuclear fission reactor to break down U-235 is:

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n + 235 U -> 140 Xe + 94 Sr + 2 (1 n)

The mass of ^{235}U is 235.043924~u.

The mass of 94Sr is 93.915367 u.

The mass of 140 Xe is 139.921620 u.

If a nuclear power plant generates an output energy of 850 MW from this reaction, how many kg of ²³⁵U are fissioned in one year?