


OPERATION OF A NUCLEAR POWER PLANT

by Homer J. Simpson



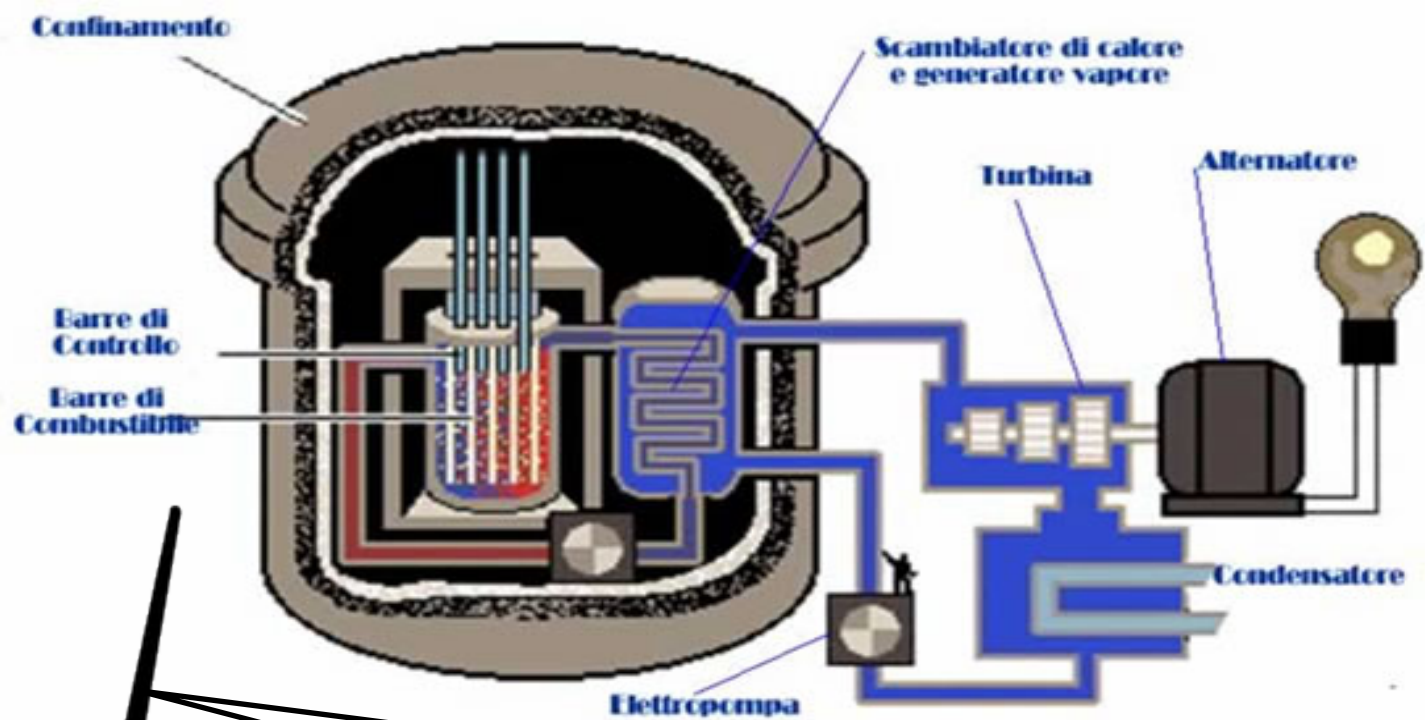
A cartoon illustration of Homer Simpson standing with his arms crossed. He is wearing his signature white short-sleeved shirt and blue trousers. He has a neutral expression and is looking slightly to the right.

D'oh, so I have to
commit myself.

Stupid Flanders!

Hi everybody, surely you
would know who I am, but
however I'll present myself.
My name is Homer Simpson
and I work as security
supervisor in sector 7-G in the
Springfield's nuclear power
plant.

But today I'm here to explain
you the nuclear power plant's
working



The principle of operation of nuclear power plants is similar to the thermal power plants. In nuclear power plants production of the steam that drives the turbine is accomplished in the nuclear reactor. The key part of the nuclear reactor is the core. This is made of containers in which is inserted into the nuclear “fuel”: pellets of uranium.



Inside the core is triggered the process of controlled nuclear fission which produces the heat necessary to heat the water and transform it into high pressure steam. The steam is conveyed to the turbine that transmits its mechanical energy to the alternator that transforms it into electrical energy.



The reactor must have a structure that not leaves leak radioactive substances which are released during the fission process. For this reason the reactor is added in a stainless steel cylinder placed inside a container in reinforced concrete thick at least one meter. Even the building containing the reactor is made of a solid reinforced concrete structure.



I PRO DELL'USO DI UN REATTORE NUCLEARE:



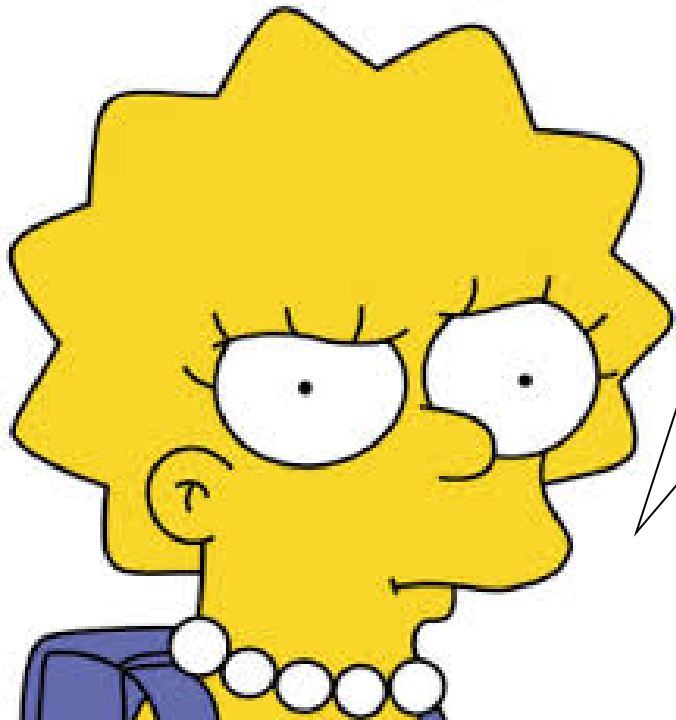
-It does not produce greenhouse gases!

-It produces electricity on a large scale!

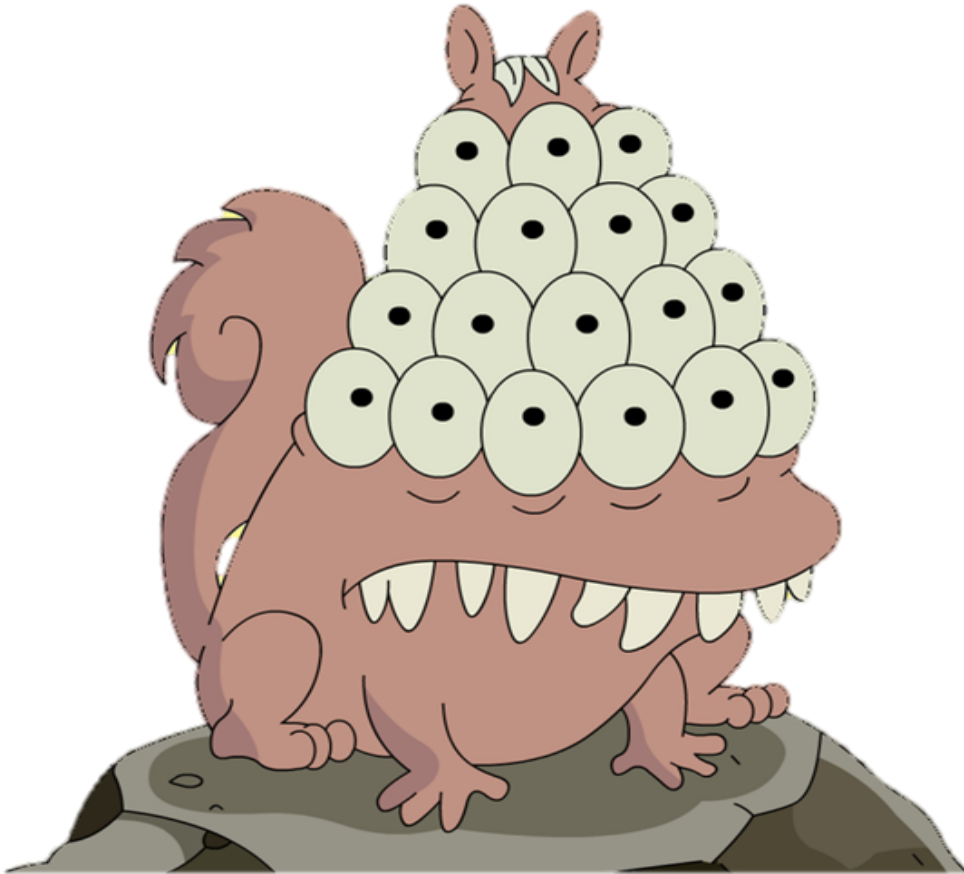
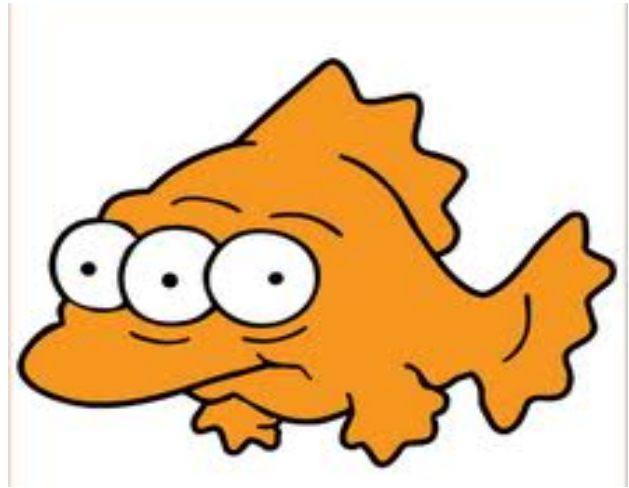
-Nuclear power plant reduces the energy dependence of a country relative to other

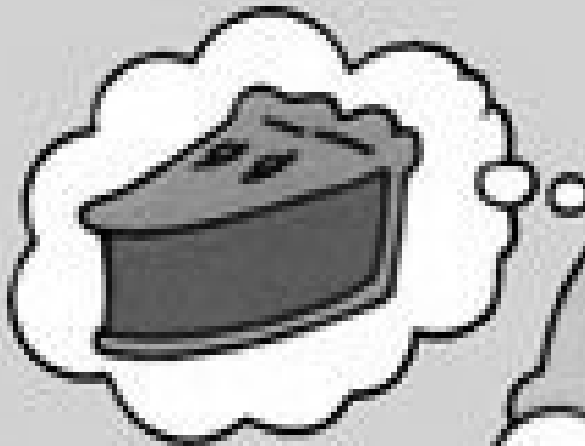
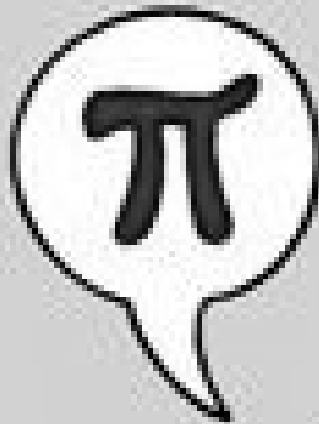
I CONTRO:

- It produced radioactive waste difficili da smaltire
- It does not solve the problem of energy supply of a country
- It involves high costs of construction, maintenance and demolition
- It requires a higher level of security compared to other power plants because it is the cause of terrible environmental consequences in case of accident



These are the possible consequences of radioactivity:





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With the contribution of
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MATT
GROENING

