How does a breeder work?

A breeder generates electricity while it creates not only its own fuel, but extra fuel, too.

The breeder reactor works in much the same way as most other electric generating plants. The major difference is its fuel. Some plants burn coal or oil. Non-breeder nuclear power plants use uranium as a fuel, while breeders burn a mixture of uranium and plutonium.

Nuclear power generated by commercial plants today is cleaner than power generated by other sources, and it's nearly always more economical.

The potential of our uranium resources depends on the breeder. Almost all of the uranium we mine is U-238, which breeders can use. U-238 cannot be used in non-breeders. So you can see that breeders will help us use our uranium resources more efficiently. This will in turn stretch those resources into the 21st century and beyond.

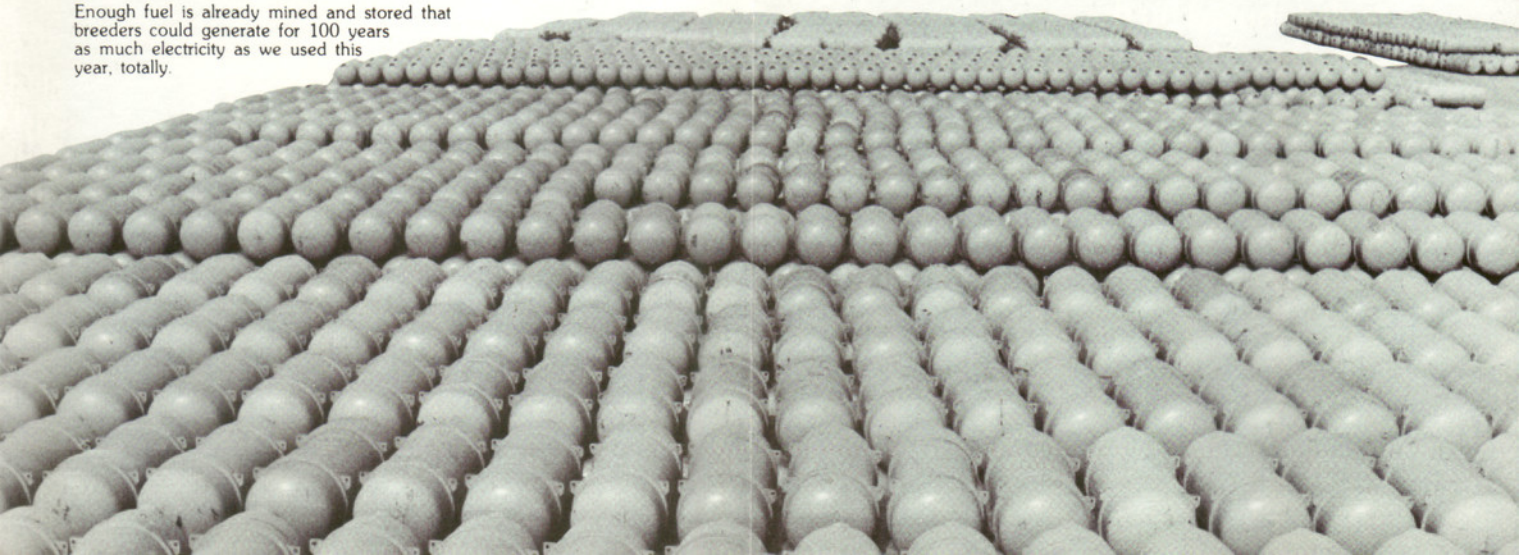
While a breeder generates electricity, it changes U-238 into another breeder fuel – plutonium 239. And it creates enough to refuel itself, with some left over for other plants.

Breeders can use all of the atoms in the uranium we mine.

Non-breeders use less than 1%.

The breeder can extend the usefulness of our Nation's uranium supply, which would otherwise be used up in 50 or 60 years, by a thousand or more years. This will give us a virtually unlimited source of clean, economical electricity, and this source will be totally independent of foreign countries.

Enough fuel is already mined and stored that breeders could generate for 100 years as much electricity as we used this year, totally.



This is one of a series of answers to the most frequently asked questions about breeder reactors.

the Breeder

For other answers or more detailed information, write or call:

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Published by Breeder Reactor Corporation 100M278