Mechanism of FBR and Items Subject to Research and Development at "Monju"

Mechanism of Fast Breeder Reactor

Reactor vessel Reactor containment facility



Primary system Intermediate heat exchanger

[Efficiency in Use of Natural Uranium in the Nuclear Fuel Cycle]

Type of Reactor	Uranium Use Efficiency
Light Water Reactor (once-through)	0.50%
Light Water Reactor (MOX-fuel use)	0.75%
FBR	Up to about 60% *

* : Theoretical value on assumptions of 50 GWd/t burn-up, limitless recycling, and up to about 3% loss during reprocessing and fabrication.

(Source) "Plutonium," written and edited by Atsuyuki Suzuki

●Items Subject to Research and Development at "Monju"

Trial Operation



(Source) Data prepared by the Japan Nuclear Cycle Development Institute and included in the Report of Third Subcommittee