

# Causes of the Accident at Chernobyl Nuclear Power Plant

## Lack of Safety Culture

### Design Defects

- No containment vessel
- Designed to easily turn off safety equipment
- Positive void coefficient; during low power operation, the more voids (froths) in cooling water, the more output, etc.

### Operator Regulation Violation

- Withdrew control rods more than regulated
- Operated with Emergency Core Cooling System (ECCS) turned off
- Conducted a special test at lower power than planned

Continuous operation was prohibited due to instability at low power range (less than 20% of total output), etc.

### Operational Mismanagement

- Managed by a non-reactor-specialist
- A special test was conducted without due processes or approval throughout the power plant
- Inadequate examinations on safety measures, etc.