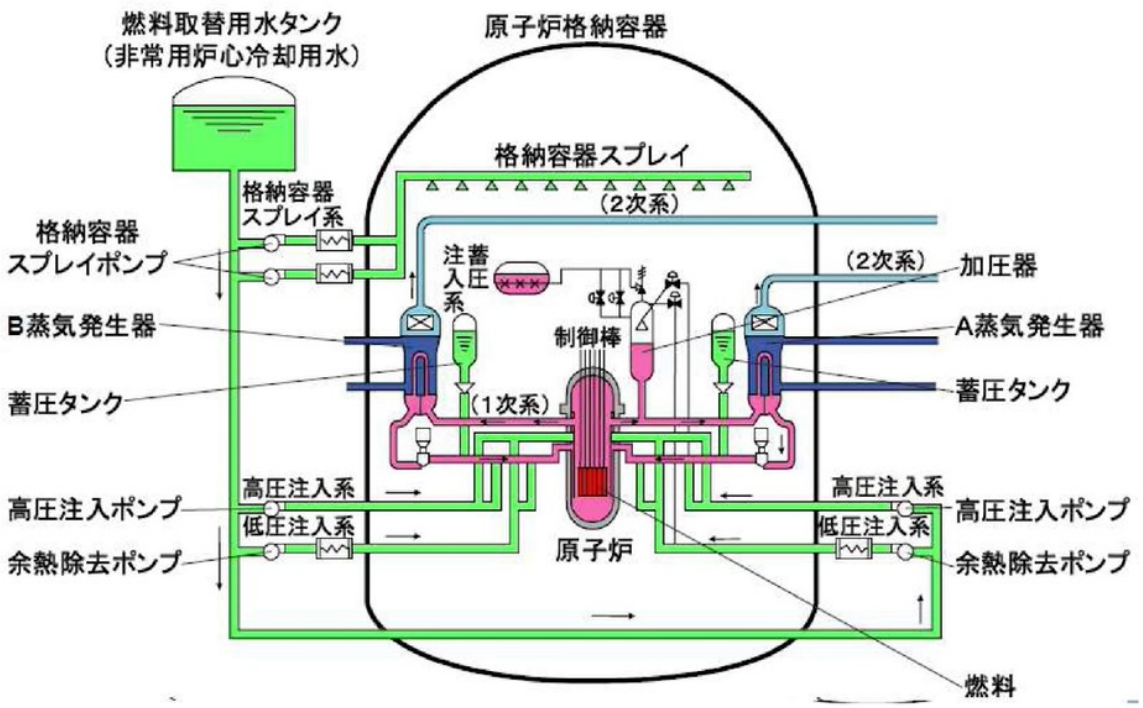
現行の大型原子力と、
最新の大型原子炉

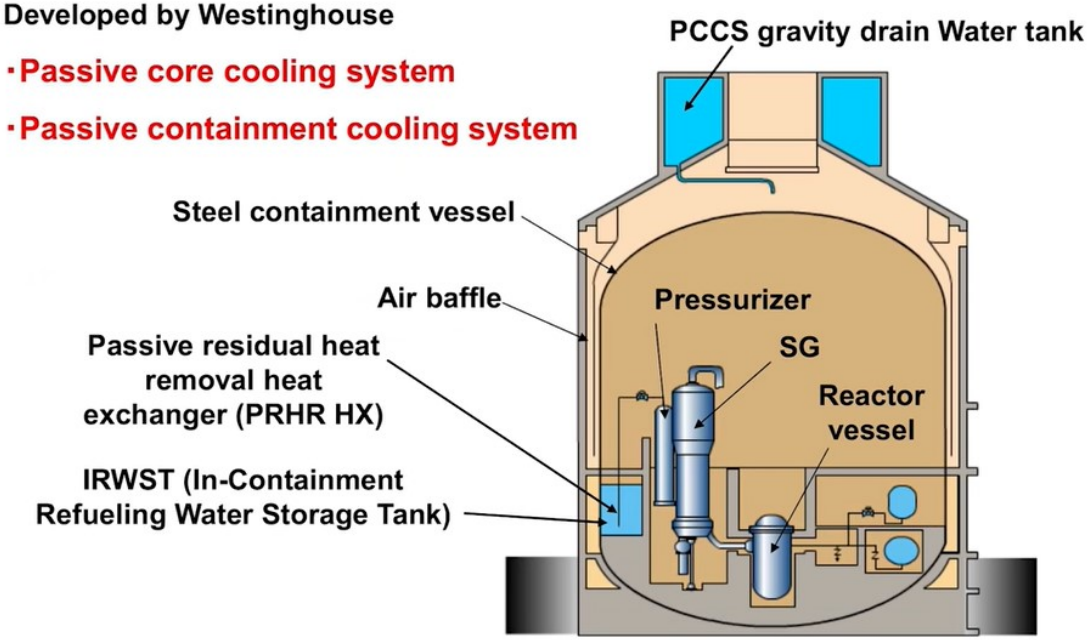
現行の加圧水型原子炉のECCS



WH社＋TOSHIBA　AP1000の静的安全系

Developed by Westinghouse

- Passive core cooling system
- Passive containment cooling system

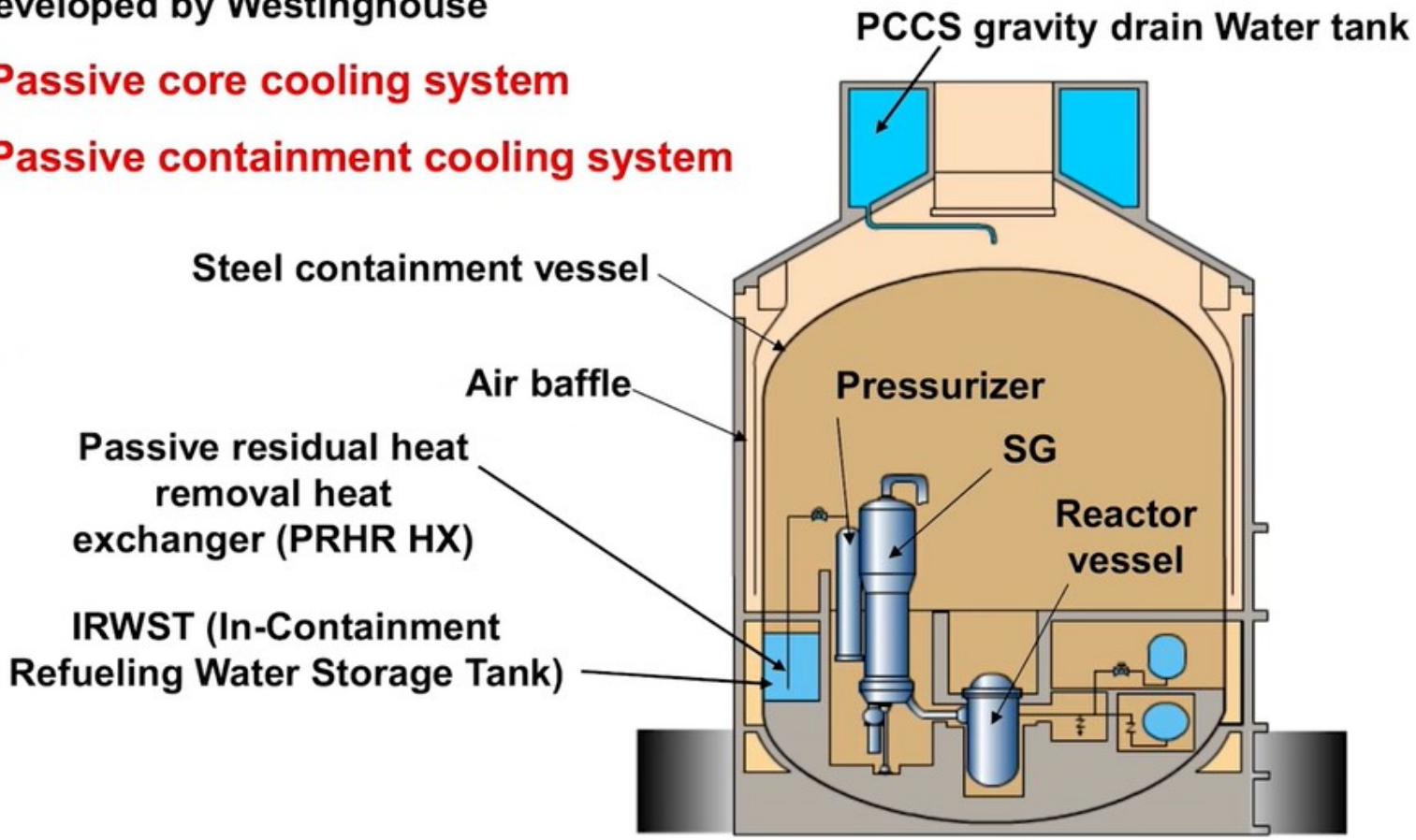


WH社＋TOSHIBA　AP1000の静的安全系

Developed by Westinghouse

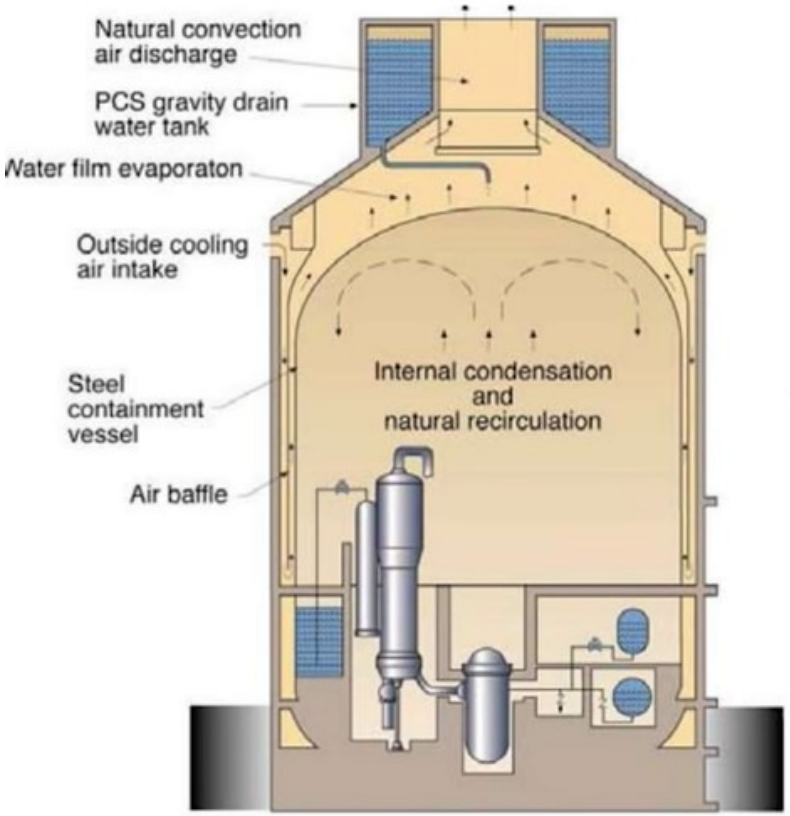
・Passive core cooling system

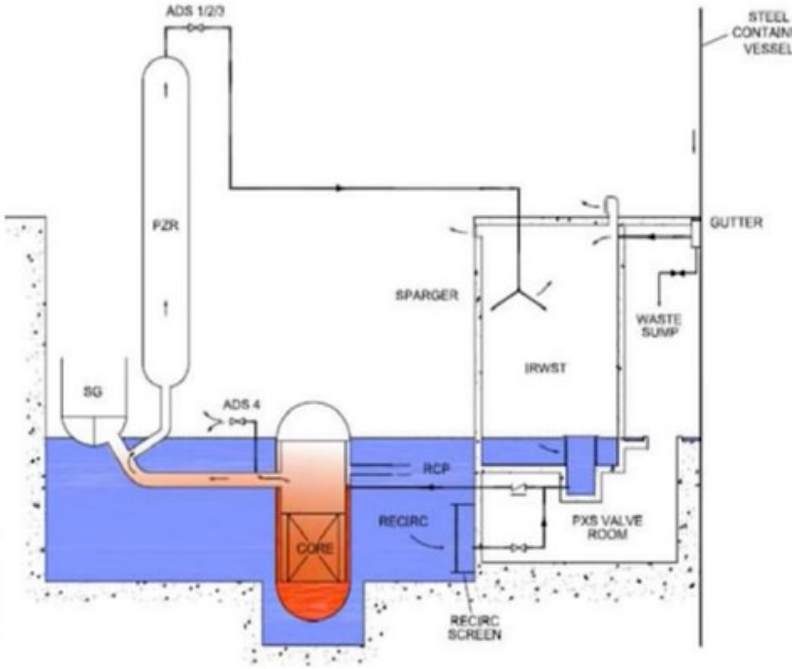
・Passive containment cooling system



AP1000の自然冷却システム

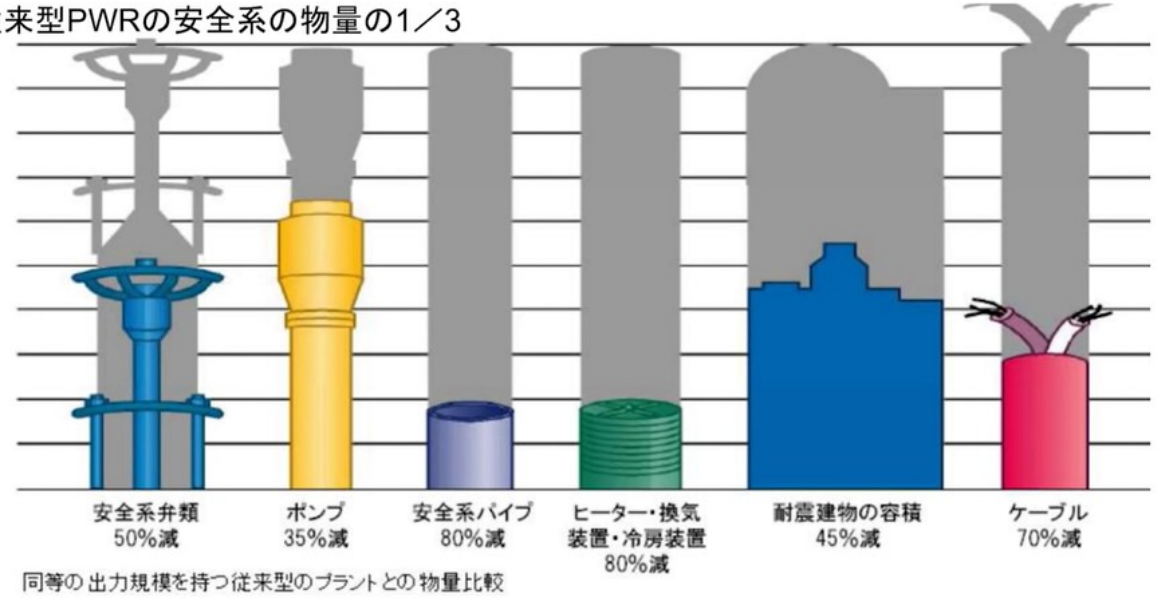
■外部注水に頼らずに、自然冷却で事故収束





AP1000の安全系の大幅簡素化

従来型PWRの安全系の物量の1／3



下記の出所を基に作成した。

図7　AP1000の受動安全設計による機器類の物量低減

【出所】R.A.Matzie：The AP1000 Reactor Nuclear Renaissance Option（September 26, 2003）, 21/31,
http://www.eng.tulane.edu/FORUM 2003/Matzie%20Presentation.pdf