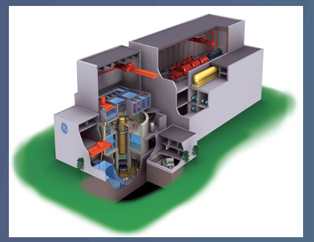
U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

RIC 2011

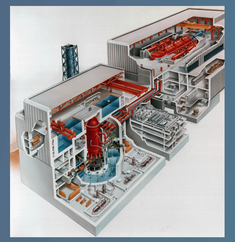
Combined License and Early Site Permit Applications Under Review



Economic Simplified Boiling-Water Reactor

Features:
- 1,594 megawatts electric (MWe)
- Based on Simplified Boiling-Water Reactor (BWR) and Advanced BWR
- Natural circulation
- Passive safety systems

Certification Status:
- Design certification application submitted August 2005
- In rulemaking



Advanced Boiling-Water Reactor

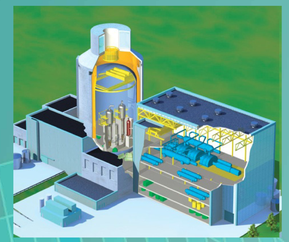
Features:
- 1,350 MWe
- Vessel-mounted internal recirculation pumps
- Fine motion control rod drives
- Three full-train emergency core cooling systems

Certification Status:
- Certified May 1997
- Application submitted June 2009 to amend the design control document to demonstrate compliance with the aircraft impact rule
- Amendment in Rulemaking
- Two certification renewal applications were submitted in calendar year 2010

Evolutionary Power Reactor

Features:
- 1,600 MWe
- Four 100-percent-capacity engineered safety trains
- Double-walled containment

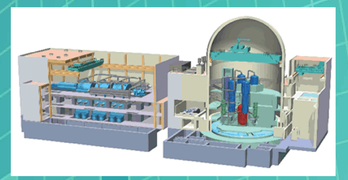
Certification Status:
- Design certification application submitted December 2007



AP1000

Features:
- 1,117 MWe
- Passive containment cooling system with steel containment vessel and natural circulation air flow
- Gravity drain core makeup tanks and refueling water storage tanks natural circulation heat exchangers

Certification Status:
- Certified December 2005
- Amendment in rulemaking



U.S. Advanced Pressurized-Water Reactor

Features:
- 1,700 MWe
- Four-train configuration
- Redundant digital control systems
- In-containment refueling water storage pit

Certification Status:
- Design certification application submitted December 2007