Westinghouse

# AP300™ SMR

## MOST ADVANCED, PROVEN & READILY DEPLOYABLE SMR SOLUTION


# ONLY SMR

**based on deployed, operating & advanced reactor technology**

Westinghouse AP300 Small Modular Reactor

Westinghouse proudly brings 70 years of experience developing & implementing new nuclear technologies that enable, reliable, clean, safe and economical sources of energy for generations to come. Our AP300 SMR leverages tens of millions of hours on AP1000® reactor development. The AP300 SMR technology builds upon the success of AP1000 reactors currently operating around the globe.

We pioneered passive safety systems. AP300 utilizes identical passive safety systems used in the AP1000 reactor to maintain safe shutdown condition.

- 330MWe (990MWth) 1-loop PWR with proven, demonstrated reliability
- Advanced Passive Safety based on AP1000 technology brings licensing certainty
- Proven pedigree throughout the plant lifecycle ensures deployment & long-term operations success
- AP300 SMR's smaller safety related footprint reduces construction, operating & maintenance costs

**BASED ON LICENSED AP1000® TECHNOLOGY**
+18 REACTOR YEARS OF OPERATIONAL PEDIGREE

# BASED ON REAL-WORLD PROVEN TECHNOLOGY

The AP300 SMR, 330MWe (990MWth), is based on the licensed AP1000 pressurized light water technology that has demonstrated industry leading reliability.

- More than 30 years licensing advanced passive safety technologies with global regulators
- Westinghouse is a world leader in delivering nuclear fuel. AP300 SMR utilizes our robust fuel design that incorporates a variety of proven and advanced fuel features.
- Uses advanced, proven I&C technology to simplify operations and increase reliability.
- Uses identical technology as the AP1000 reactor including: design & licensing methodologies, major equipment & components, passive safety systems, proven fuel and supply chain.

# ADVANCED SAFETY

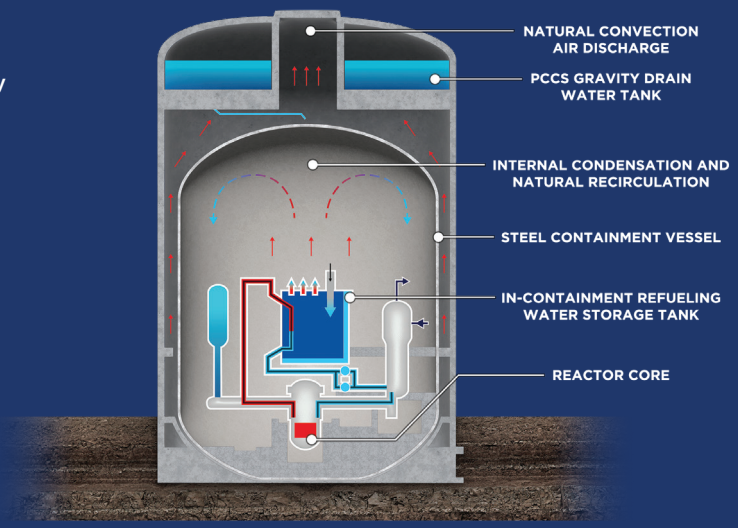
The AP300 SMR is based on proven AP1000 passive safety systems that have been extensively analyzed and tested to improve the safety of the plant. Global regulators have reviewed these systems and determined that they meet advanced safety criteria.

**Fail Safe** Designed to achieve and maintain safe shutdown condition without operator action, back-up power or pumps

**Self Sufficient** Passive approach to safety system operation eliminates the need for backup power & cooling supply

**Hazard proof** Protected by a robust containment designed to withstand extreme external hazards

**Defense in Depth** Multiple layers of defense for accident mitigation




# READILY DEPLOYABLE

AP300 SMR has a proven pedigree throughout the plant lifecycle. For customers this means risk reduction leading to smoother deployment and operational success. **Here is what Westinghouse can deliver:**

**TECHNOLOGY READINESS**
Tens of millions of hours dedicated to AP1000 reactor development. Multiple AP1000 reactors operating and dozens pending.

**LICENSING CERTAINTY**
Based on licensed AP1000 technology. AP300 passive safety systems backed by extensive testing.

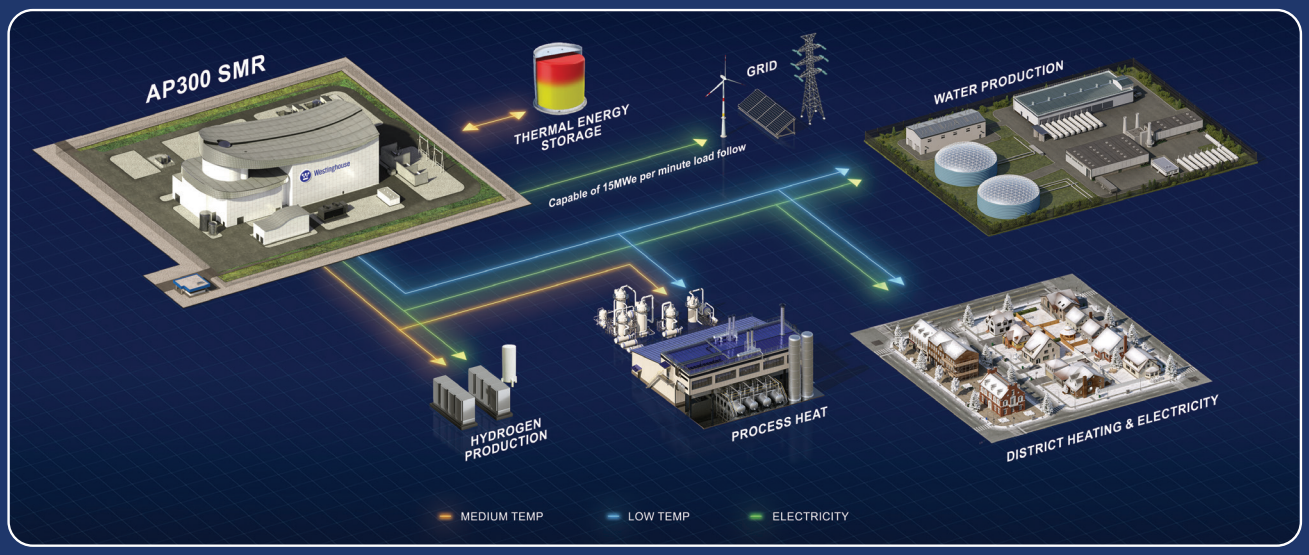
**ESTABLISHED SUPPLY CHAIN**
Incumbent AP1000 suppliers can deliver major equipment. Demonstrated capability to localize supply chain.

**MODULAR CONSTRUCTION**
Simplified, modular, ultra compact nuclear island (costliest portion of any reactor) reduces construction costs/schedule.

**RELIABLE OPERATIONS & MAINTENANCE**
Record setting AP1000 operational & outage performance. Targeting 80-year life cycle.

# APPLICATION VERSATILITY

AP300 SMR is the backbone of a community clean energy system. Flexible performance provides a proven capability to stabilize modern renewable heavy electric grids, including fast load change capabilities to support variations in demand. Includes additional capability to support district heating, desalination and hydrogen production.

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