



AP300™ SMR

**MOST ADVANCED, PROVEN & READILY
DEPLOYABLE SMR SOLUTION**



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As the world faces the challenges of climate change and energy security, the need for proven solutions that deliver reliable, cost-effective, clean and safe energy has never been greater.

ONLY SMR

based on deployed, operating & advanced reactor technology

Westinghouse AP300 Small Modular Reactor



LEGACY OF INNOVATION

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.



PROVEN TECHNOLOGY

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.



ADVANCED SAFETY

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



READILY DEPLOYABLE

Gain the benefits of the Westinghouse AP1000 PWR technology in a smaller power output to augment the backbone of your community energy system.



WESTINGHOUSE TECHNOLOGY IS THE BASIS FOR APPROXIMATELY 50% OF THE WORLD'S OPERATING NUCLEAR PLANTS.



BASED ON LICENSED AP1000® TECHNOLOGY
+25 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

Uses advanced, proven I&C technology to simplify operations and increase reliability.

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 identical technology as the AP1000 reactor including: design & licensing methodologies, major equipment & components, passive safety systems, proven fuel and supply chain.



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



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

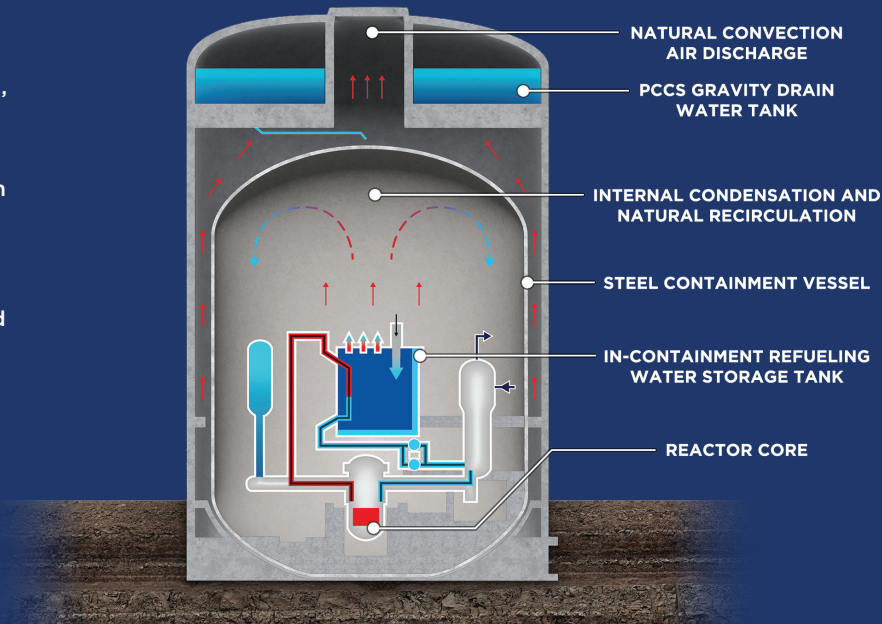
Passive approach to safety system operation eliminates the need for backup power & cooling supply

Hazard Proof

Protected by a robust containment designed to withstand extreme external hazards

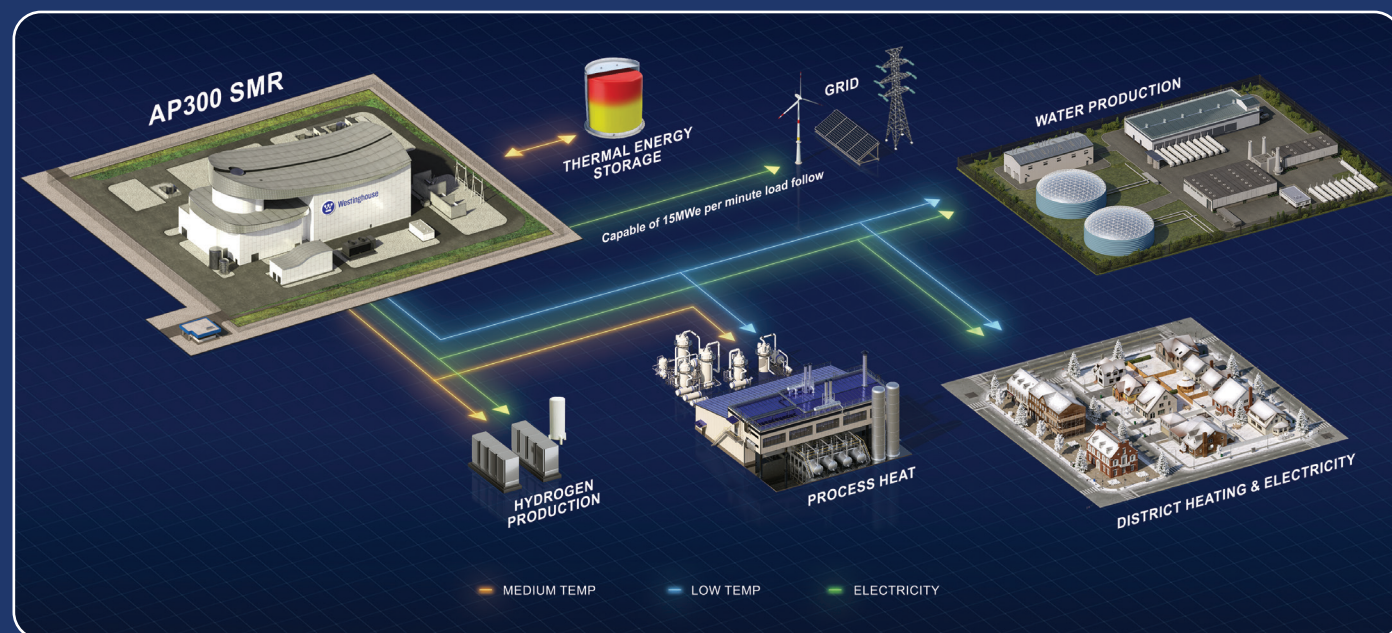
Defense in Depth

Multiple layers of defense for accident mitigation



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.



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



MORE THAN 10,000 EMPLOYEES IN OVER 70 GLOBAL BEST-IN-CLASS NUCLEAR & FUEL MANUFACTURING FACILITIES & ESTABLISHED SUPPLY CHAIN.

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