

Westinghouse AP1000® PWR: Meeting Customer Commitments and Market Needs

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Westinghouse Electric Company once again sets a new industry standard with the AP1000® reactor. Historically, Westinghouse plant designs and technology have forged the cutting edge of worldwide nuclear technology. Today, about 50 percent of the world's 440 nuclear plants are based on Westinghouse technology. The AP1000 is the safest and most economical nuclear power plant available in the worldwide commercial marketplace,

and is the only Generation III+ reactor to receive Design Certification from the U.S. Nuclear Regulatory Commission (NRC).

The AP1000 features proven technology, innovative passive safety systems and offers:

- Unequaled safety
- Economic competitiveness
- Improved and more efficient operations

The AP1000 builds and improves upon the established technology of major components used in current Westinghouse-designed plants with proven, reliable operating experience over the past 50 years. These components include:

- Steam generators
- Digital instrumentation and controls
- Fuel
- Pressurizers
- Reactor vessels

Simplification was a major design objective for the AP1000. The simplified plant design includes overall safety systems, normal operating systems, the control room, construction techniques, and instrumentation and control systems. The result is a plant that is easier and less expensive to build, operate and maintain.

The AP1000 design saves money and time with an accelerated construction time period of approximately 36 months, from the pouring of first concrete to the loading of fuel. Also, the innovative AP1000 features:

- 50% fewer safety-related valves
- 80% less safety-related piping
- 85% less control cable
- 35% fewer pumps
- 45% less seismic building volume

Eight AP1000 units under construction worldwide – Four units in China – Four units in the United States