

Westinghouse Partnership with Idaho National Laboratory and Leadership in Nuclear Energy (LINE) Commission

*Highlighting the Value of the Idaho National Laboratory
to Industry*

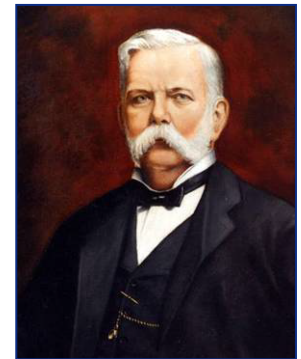
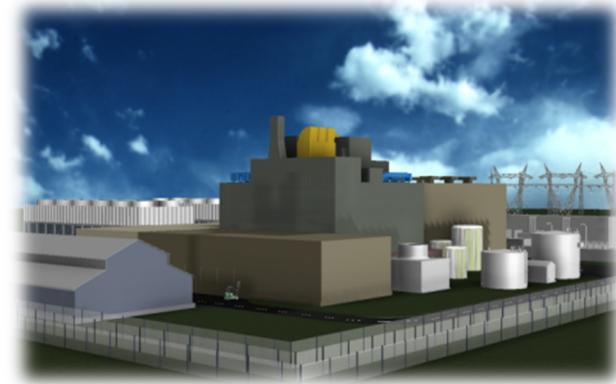
**Presented by John Goossen
VP of Innovation and SMR Development
Westinghouse Electric Company**



Westinghouse Electric Company LLC

Westinghouse Electric Company

- Westinghouse Electric Company provides fuel, services, technology, plant designs and equipment to utility customers in the worldwide commercial nuclear electric power industry
- More than 60 years of nuclear experience
- Nearly 50 percent of the nuclear power plants in operation worldwide, and nearly 60 percent in the United States, are based on Westinghouse technology
- We are only company operating under the name of George Westinghouse's original company



Today's Westinghouse

Nuclear Services

Focused on operating plant success through reliable operation, maximized power output and better (shorter, more predictable) outages

Nuclear Power Plants

Specializing in the technology of new nuclear power plants and component manufacturing

Nuclear Fuel

A single-source fuel provider for PWR, BWR, VVER, AGR and Magnox reactors worldwide

Nuclear Automation

Instrumentation and control systems to enhance the reliability of nuclear plant control and safety systems



Nuclear Services

Focus on being a full-service engineering supplier:

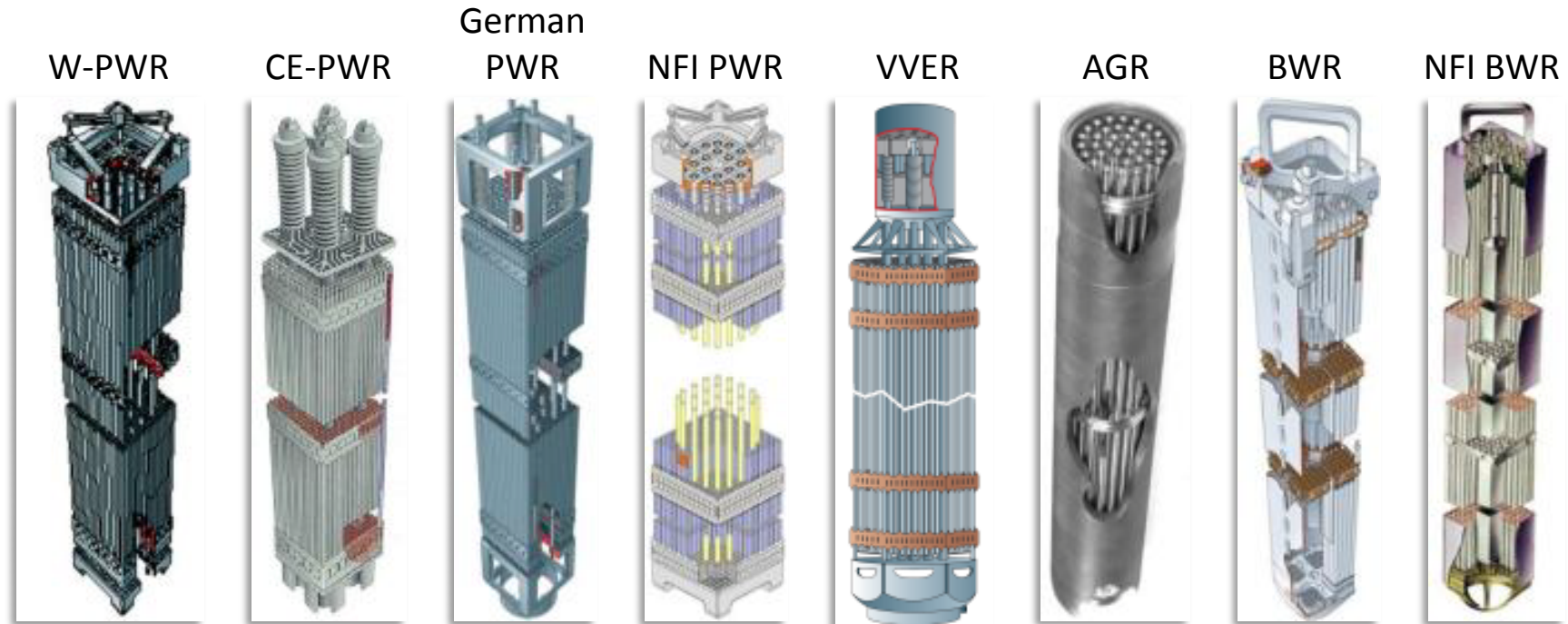
PWR OEM
BWR OEM

Hardware Design and Manufacture
Spare Parts



Nuclear Fuel

Westinghouse manufactures more types of fuel than any other supplier



Nuclear Automation



Plant Information and Control Systems



Plant Protection and Monitoring Systems



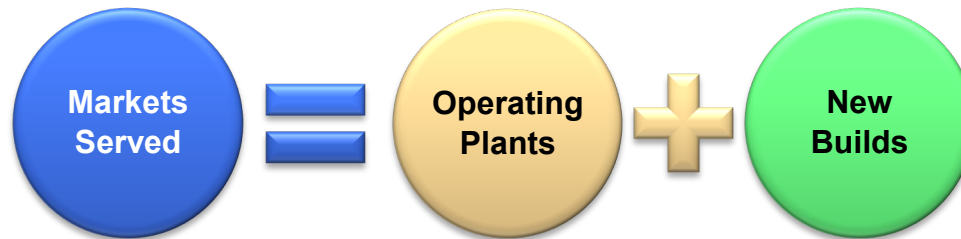
Control Room Design and Human Factors Engineering



Simulator Systems and Training Solutions



Cyber Security



Westinghouse Electric Company

VISION

Our vision is to be the customers' choice in supplying leading-edge nuclear technology to satisfy the world's growing demand for energy.



Westinghouse

Nuclear Power Plants



Sanmen Site Progress, Winter 2009 to Spring 2012

Westinghouse is meeting the growing demand for power internationally and in the U.S. by deploying the passively safe **AP1000®** technology



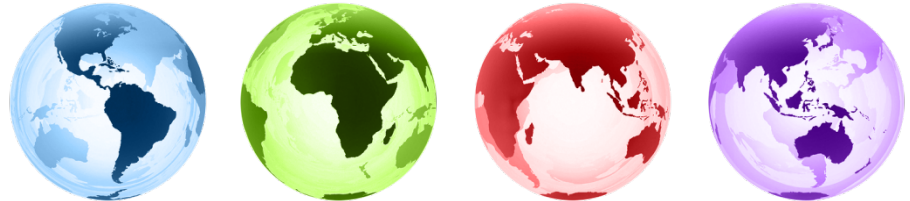
VC Summer Site Progress



Vogtle Site Progress

Westinghouse's SMR Vision

Westinghouse will be the first to deploy a safe, economic SMR to meet the many needs of existing and new to nuclear customers



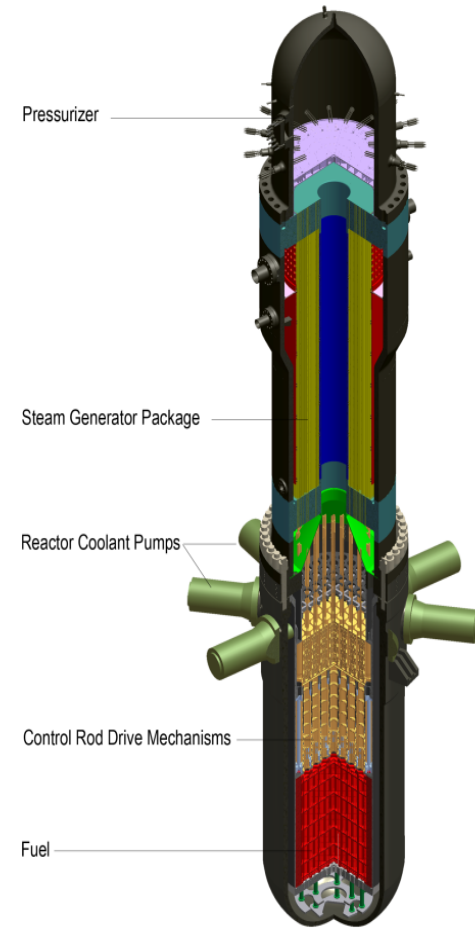
- Working within constraints
 - Land, grid, cooling water, financing, distributed service territory
- Offering clean energy
 - Offset owner costs for infrastructure development: land, cooling, T&D
 - Generation diversity
 - Operational flexibility
- Providing project certainty
 - Reduced licensing risk
 - Short-construction durations
 - Cost predictability and certainty

New applications for nuclear...

*Aging Fossil Plants
District Heating
Remote Markets
Small Grid Markets
Desalination
Process Heat*

The Westinghouse SMR

- An integral PWR—single 225 MWe reactor (standalone plant design)
- Innovative packaging of proven components
- The highest levels of safety with fewer accident scenarios
- Compact reactor coolant system and containment
- Modular design – Rail/Truck Shippable
- Westinghouse will submit the Design Certification application for its SMR in the third quarter of 2013



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W-SMR Integral Reactor Vessel

For the Good of the Industry: Emergent Needs Identified by INL and Westinghouse

- Seismic capabilities improvements
 - Design; testing and analysis; isolation
- Hybrid electrical grid performance improvements
- Reactor maneuvering and load following performance improvements
- Improvements in accident tolerance of nuclear fuel
- Fuel performance and design improvements resulting from Fukushima fuel analysis
- High energy capable used fuel storage alternatives
- Application of international safeguards monitoring for new reactor designs
- Evaluation and Assessment of cyber security and physical security design requirements
- Post Irradiation Examination (PIE) of used commercial fuel to support fuel improvements

In Conclusion

Westinghouse has always valued the importance of our national laboratories, in particular the INL, and we look forward to the continued and necessary collaboration with the INL to deliver improved nuclear solutions to satisfy the world's growing demand for energy.



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