The Future Begins…Now!

AP1000 – Simplicity and Certainty

Presented by Michael Kirst

Regional Vice President, Central and Eastern Europe

Westinghouse Electric Company

The Nuclear Renaissance is a Reality

- New build has begun
- Enhancements to current operating fleet continue
- Public acceptance at record levels
- Recognition as a clean energy source
- Demand continues to grow

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Our Role is to Maintain the Momentum

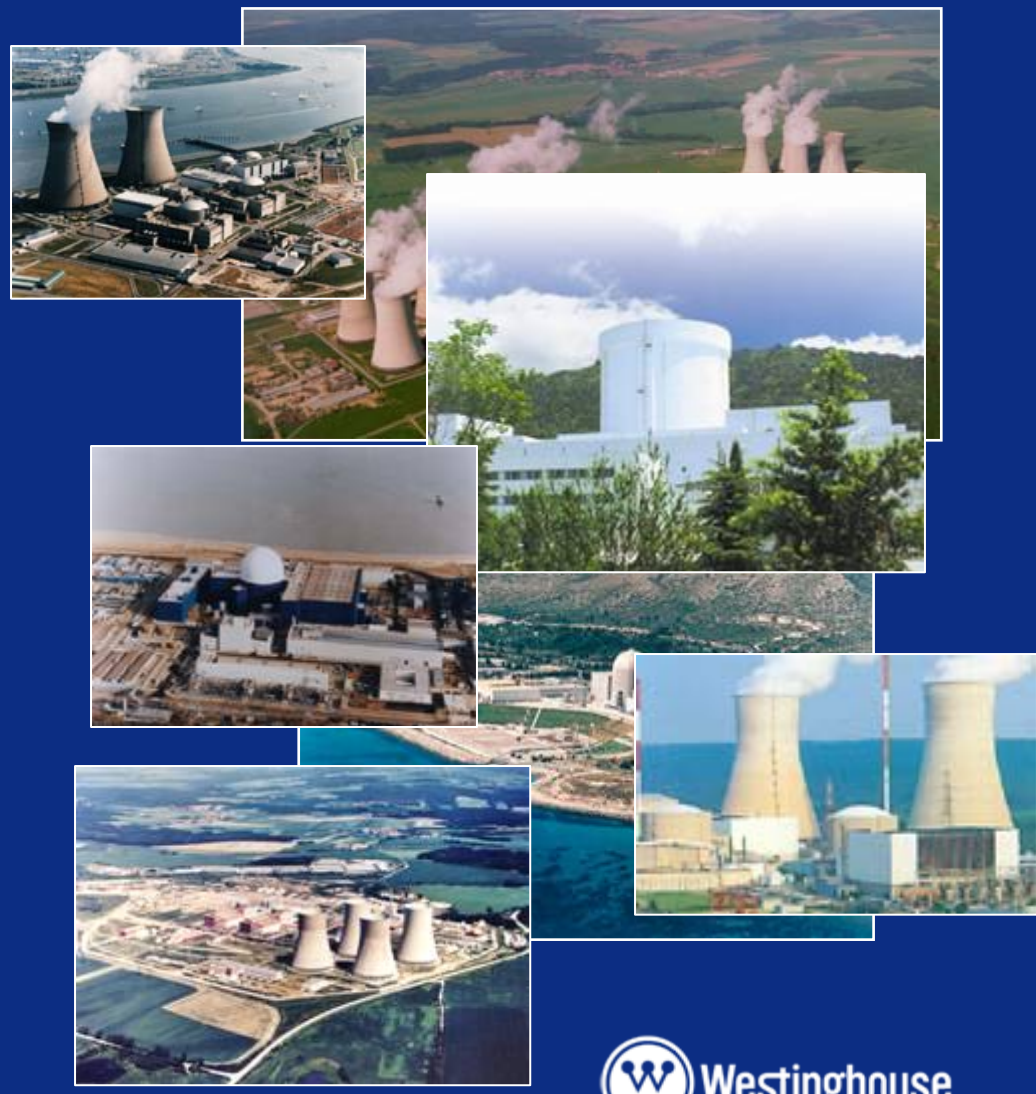
- Maintain unwavering focus on current operating fleet which is primary driver of new build renaissance
- Expand supply chain and infrastructure
- Increase communications / advocacy
- Attract and retain broad range of talent
- Bring new plants on-line, on time and on budget

Unwavering Commitment to the Operating Fleet

- Maintain current high standards:
  - Safety
  - Availability
  - Financial Performance

Westinghouse continues to invest in products and services that support the operating fleet.

85% of R&D investment aimed at operating fleet.



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Simplification and Standardization are Key to Future Nuclear Plant Construction

- Simplicity and standardization in **Design** through reduced number of components and bulk commodities
- Simplicity in **Safety** through use of passive safety systems
- Simplicity in **Construction** through modularization
- Simplicity in **Procurement** through standardization of components and plant design
- Simplicity in **Operation and Maintenance** through use of proven systems and components, and man-machine interface advancements

Improved Safety, Competitive Economics and Good Performance

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All Advanced Reactors Can Achieve Low Core Damage Frequency

- **Evolutionary plants** achieve goals by **adding** redundant safety features
  - 4 Train Safety Injection
  - 4 Train Decay Heat Removal
  - 4 Train Containment Cooling
  - 4 Train Residual Heat Removal
  - 4 Train Diesel Generators

INCREASED CAPITAL AND O&M COST

- **Passive Plants** achieve goals by **reducing** **active** safety features
  - No safety related pumps
  - No safety related fans
  - No safety diesels/no safety AC power
  - Small number of valves actuate passive systems
  - Natural forces provide plant safety

REDUCED CAPITAL AND O&M COST

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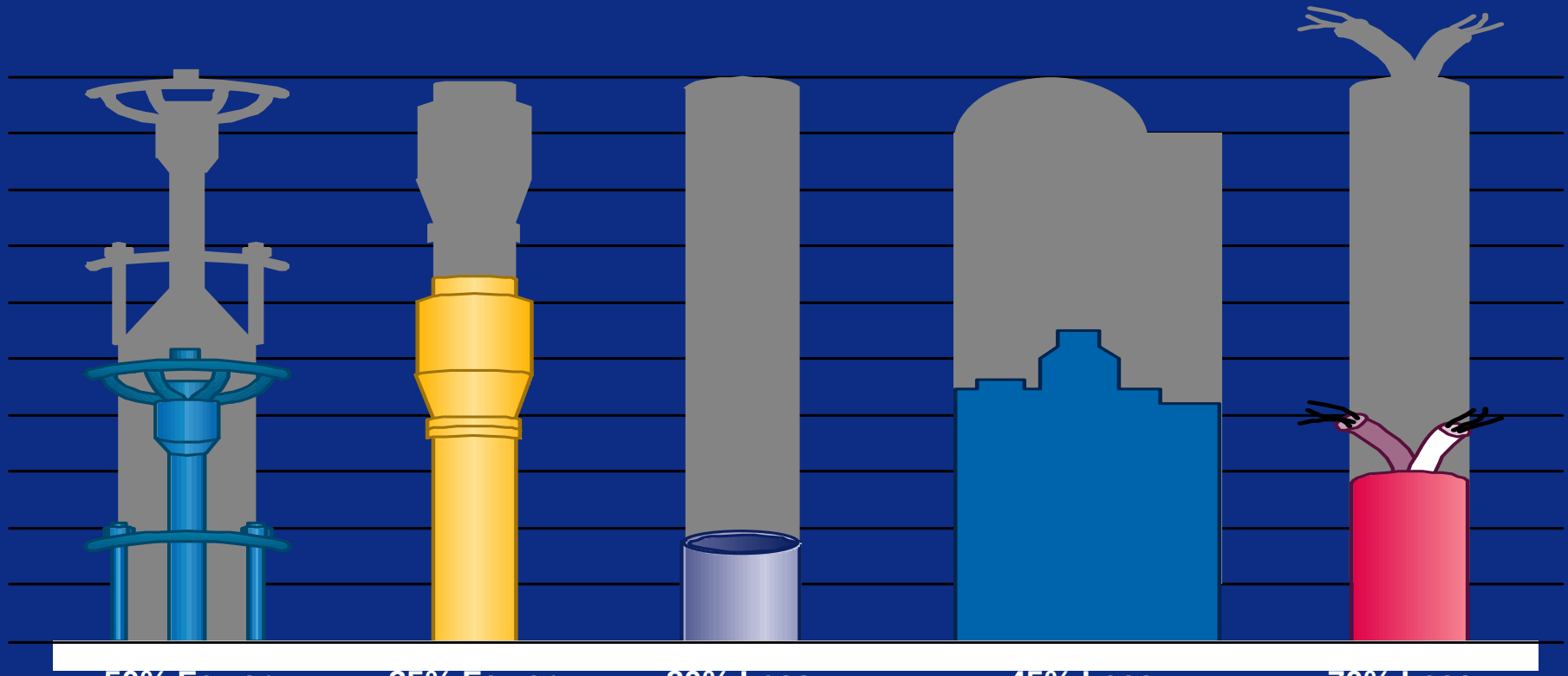
Simplification of Design Eliminates Components and Reduces Cost



50% Fewer Safety-grade Valves

35% Fewer Pumps

80% Less Safety-grade Pipe

45% Less Seismic Building Volume

70% Less Cable

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Supply Management Challenges

- Abrupt, expanding demand; diminished supply chain
- Long lead times for specialty steel forgings, SG tubing
- Logistics of moving large components around the world
- Competition with supply to other industries and competitors

Standardized plant advantages - efficiency, lower costs:

- Opportunity to establish a learning curve
- Multiple standard plants = higher production volumes

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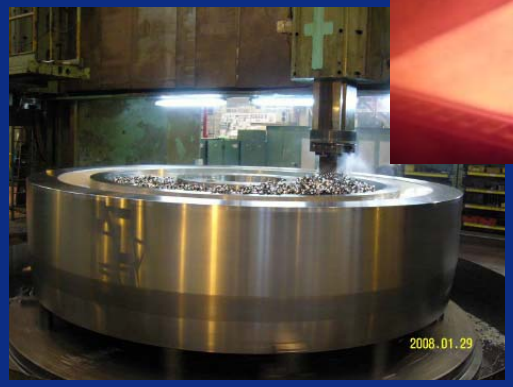
Challenges

Changing Supply Chain Scenario

- First generation of plants built by integrated suppliers
- Today, our supply chain is **international**, and geared toward providing locally upwards of 80% of resources and materials



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Challenges

Supply Chain Development is Critical

- In China, we have successfully implemented a **Buy Where We Build™** approach to projects
- This approach will also be used in the U.S., India, the U.K. and other emerging markets

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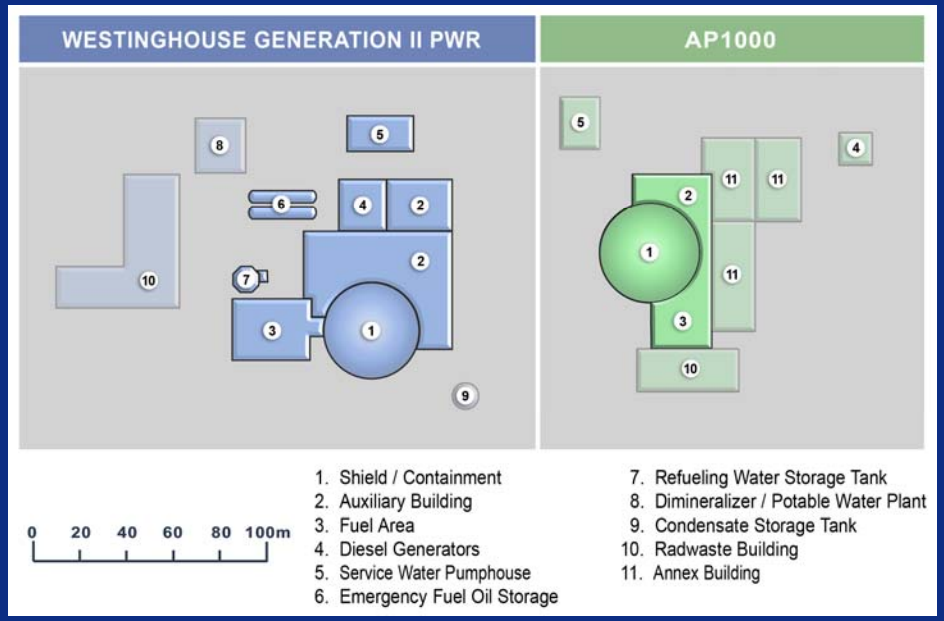
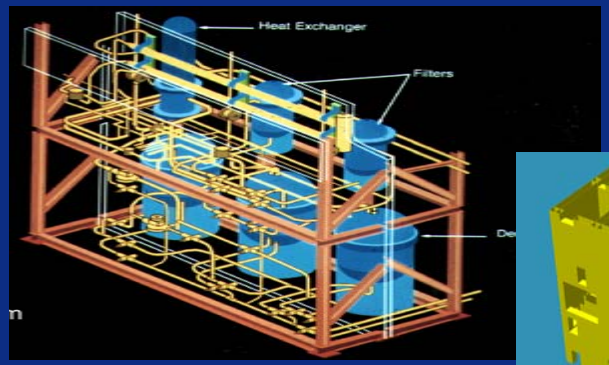
AP1000™ Design Simplification

Improved Construction Means Less Risk

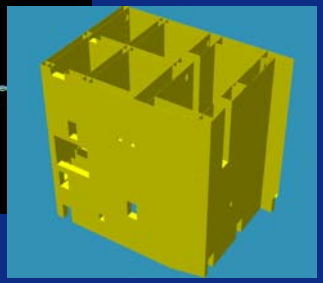


	Concrete, m^3	Rebar, metric tons
Sizewell B:	520,000	65,000
Olkiluoto:	400,000	60,000
AP1000:	<100,000	<12,000

- AP1000 footprint is more compact than current PWRs
- Systems are simpler
- Maximum use of pre-fabricated modules
- Streamlined field installation



Equipment Module



CA20 Structural Module

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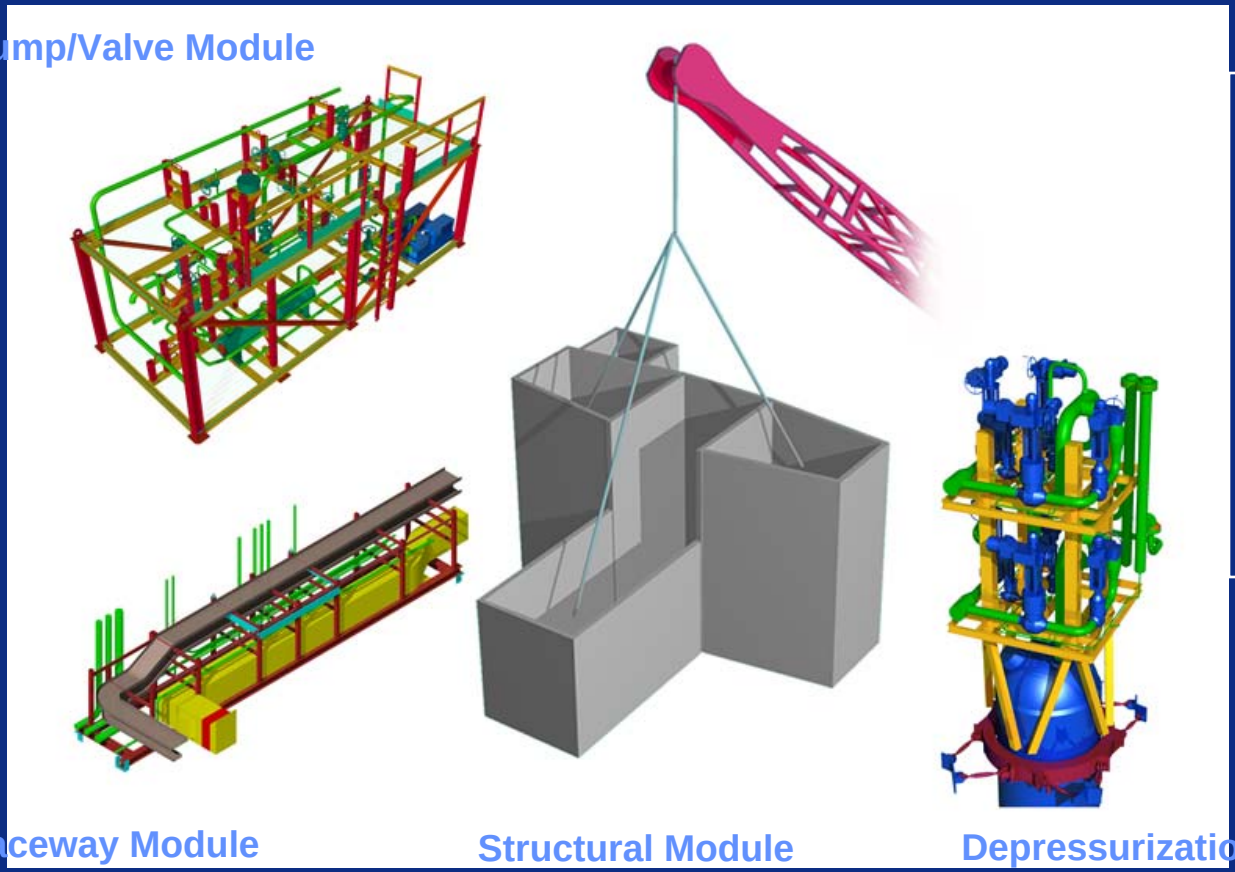
Modules Designed into AP1000 from the Beginning



Module Type	Number
Structural	122
Piping	154
Mechanical Equipment	55
Electrical Equipment	11
TOTAL	342

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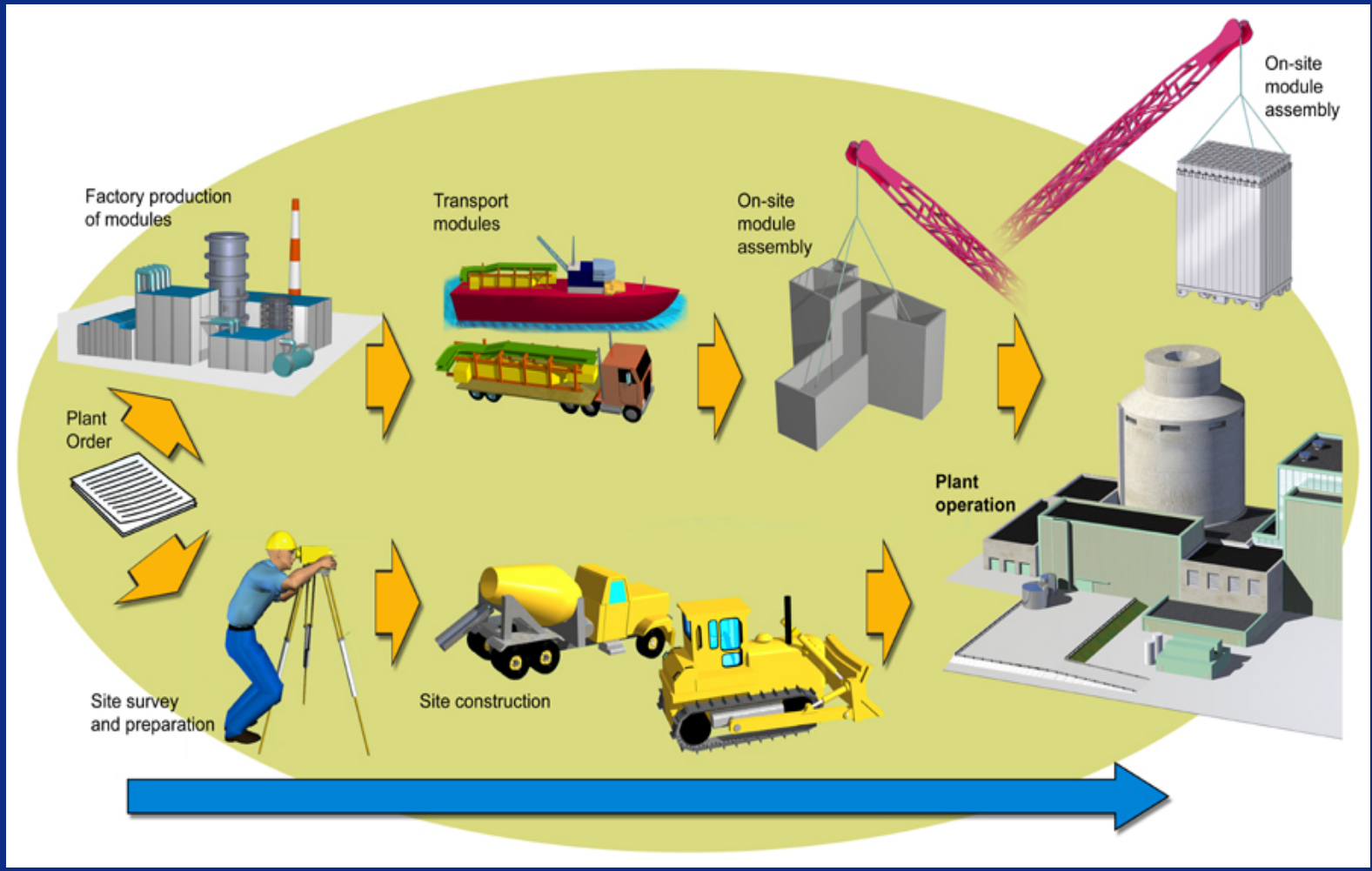
Modular Construction

- Shortened construction schedule - 36 months!
  - >25% lower than earlier generations
  - Challange to reduce further
- Reduced field manpower
- Increased factory-based manufacturing and assembly of modules
  - Improves quality - pre-testing and inspection of modules prior to shipment
- Reduced site congestion
- Construction validated in 3D/4D plant model

2 Weeks 1 Month 2 Months 1 Year 2 Years

Site work done in parallel with module fabrication and transportation



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Certified Design

EUR Compliance

May 15, 2007

USNRC Design Certification

January 23, 2006

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What's New Since Generation II Nuclear Plants?

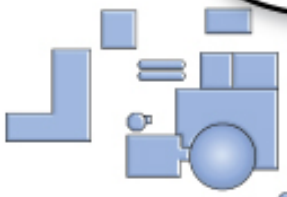
Westinghouse's AP1000™, 1100 MWe - class advanced, passive PWR

Compact & simpler:
- 50% fewer safety class values
- 80% less safety class piping
- 35% Fewer pumps; no safety system pumps
- 70% Less cable

Compact: Only 61 m³ concrete/MWe.
Less time and money to construct.
Less costly to operate.

The AP1000™ design has already been reviewed and approved by the U.S. Nuclear Regulatory Commission. Regulatory risk is less with AP1000.

Essential for modular construction. Reduce risk of field-fitting, re-work, construction delays.



Previous Era Plant

RISK

Passive design less equipment, compact

Pre-licensed NRC-certified design (Jan, 2006)

Complete detailed design before construction starts

Standardized design

Efficiencies from a real learning curve and series production of standardized equipment. Established costs and licensing status.

Horizontally diversified global supply chain

AP1000 uses global supply network of manufacturers. We are not vertically integrated. Allows us to "Buy where we build.™"

4D integrated construction model

Modular construction for better QC, shorter schedule

"Open-Top" construction greater efficiency shorter schedule

Today's AP1000

Advent of heavy lift cranes revolutionizes field construction. 1000-ton class components lowered directly in place though open top of structure. Old way- move heavy items horizontally through temporary holes in structure. Much less efficient.

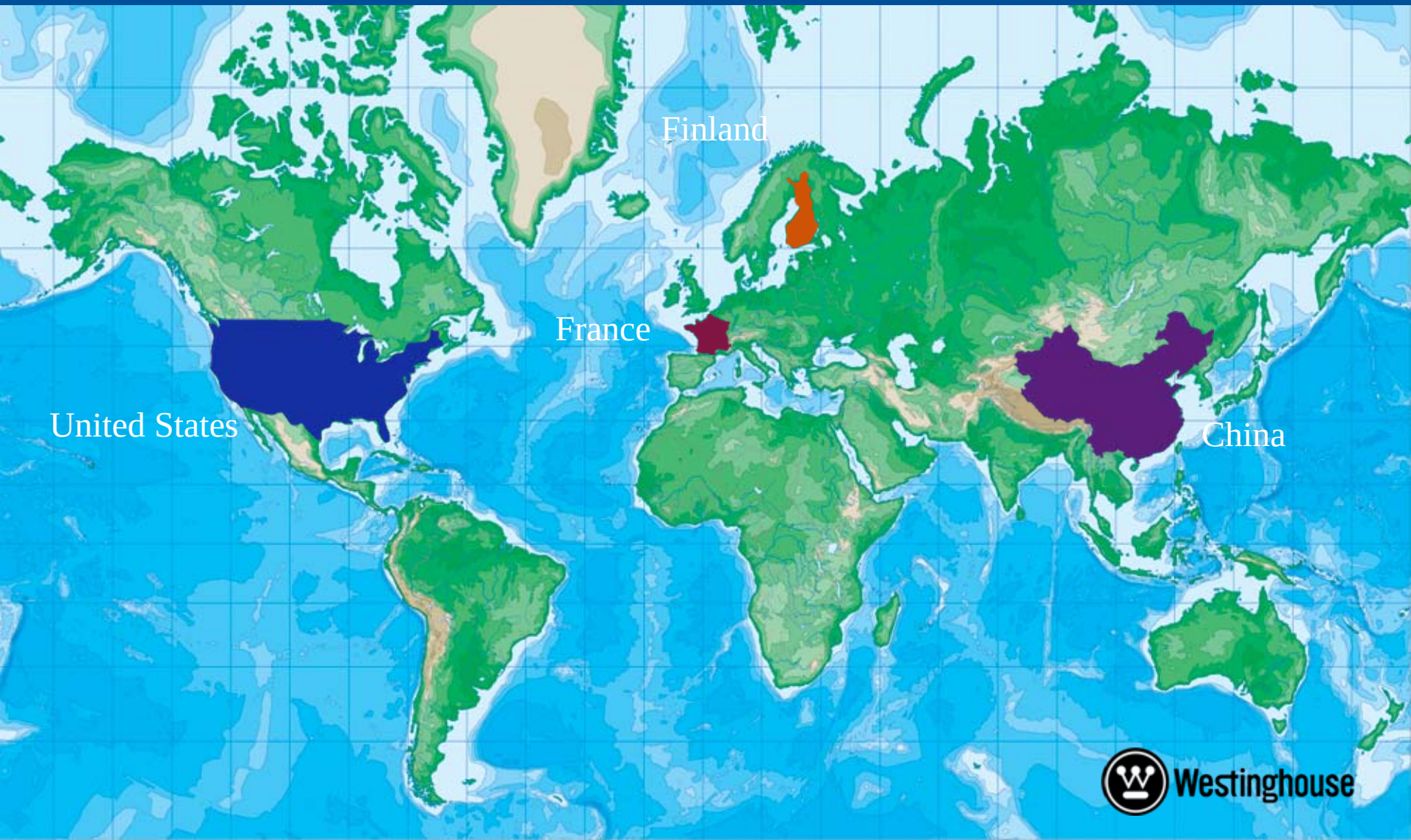
AP1000 designed from the outset to be constructed with modular instead of traditional "stick-build." Reduces expensive site labor, reduces construction time and increases quality.

3-Dimensional model with time allows unprecedented optimization of the construction plan in virtual reality long before lifting a shovel.

How AP1000 reduces investment risk

The World is Poised for Nuclear

Active Markets: Generation III and III+ Plants Underway



Four New Plants Underway in China

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China: Westinghouse AP1000™
On Schedule for 2013 Operation

- Basemat concrete pour successfully completed for Sanmen Unit 1 in late March, and for Haiyang Unit 1 in late September

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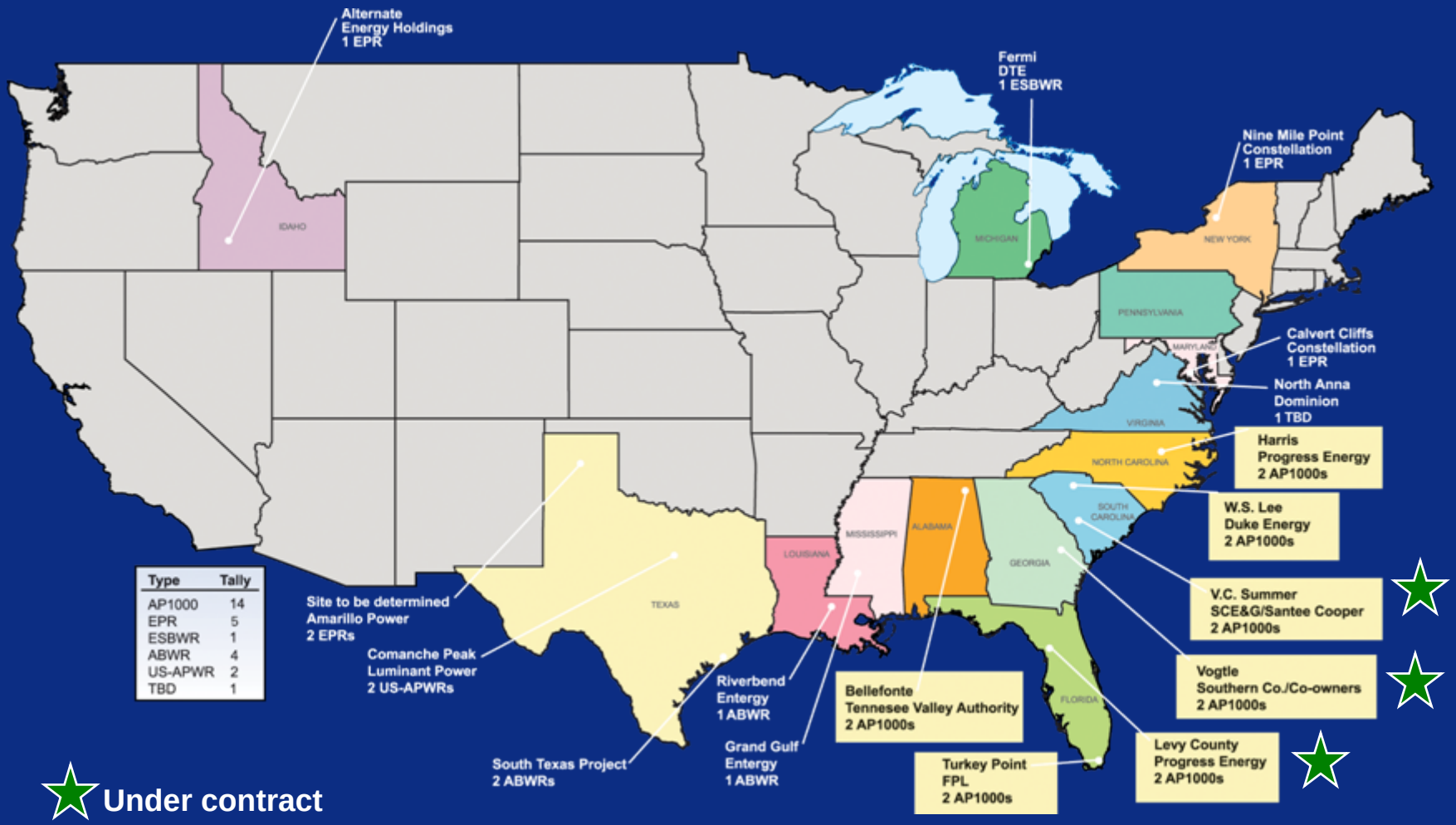
U.S.: 25 New Plants Announced
6 Under Contract



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U.S. Progress

- Vogtle 3 & 4
  - Site mobilized and early construction underway
- VC Summer 2 & 3
  - Site preparation continues
- Levy County 1 & 2
  - Work partially and temporarily suspended due to licensing timeline
  - Delay will allow federal climate change policy to take shape and financial markets to stabilize

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Vogtle 3 & 4 Construction

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Markets Spanning the Globe

Americas
- Argentina
- Brazil
- Canada
- Chile
- United States

Asia
- China
- India
- Indonesia
- Japan
- South Korea
- Taiwan
- Vietnam

Europe
- Belgium
- Bulgaria
- Croatia
- Czech Republic
- France
- Germany
- Hungary
- Italy
- Lithuania
- Netherlands
- Poland
- Romania
- Slovakia
- Slovenia
- Spain
- Switzerland
- United Kingdom
- Finland
- Sweden
- Ukraine

Oceana
- Australia

Africa
- South Africa
- Egypt
- Morocco
- Nigeria

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Beyond the Renaissance

- The energy issues we face today have never been more critical
- Technology providers, utilities and government alll have vital roles to play in making this a reality

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View our progress @ www.westinghousenuclear.com

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AP1000™

- AP1000 AT A GLANCE
- UNEQUALED SAFETY
- IMPROVED AND MORE EFFICIENT OPERATIONS
- ECONOMIC COMPETITIVENESS
- NEWS, UPDATES AND INFORMATION

News, Updates and Information

International Construction

Westinghouse Electric Company and its consortium are currently building four AP1000s in China. Additionally, five U.S. utilities have chosen the AP1000 for possible nuclear plant construction.

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AP1000 Construction Project Updates

China

- Haiyang
  - Photo Update 04/2009
  - Photo Update 03/2009
  - Photo Update 02/2009
  - Photo Update 01/2009
- Sanmen
  - Photo Update 03/2009
  - Photo Update 02/2009

Thank you