

Westinghouse AP1000® Plant Projects

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AP1000 Plant Value Proposition

Proven Technology and Innovative Passive Safety Systems

Passive safety replaces mechanical and electrical systems – harnesses natural forces like gravity, convection and condensation to achieve safe shutdown



Delivery Certainty

Standard design, experience from current projects and modular construction enable “Nth of a Kind” delivery performance



Regulatory Certainty

Reviewed by multiple countries; first Generation III+ reactor to receive design certification from the U.S. NRC

AP1000 Plant Experience Driving Global Delivery Certainty

- Eight AP1000 units under construction
 - Four units in China (Sanmen and Haiyang)
 - Four units in the United States (Vogtle and V.C. Summer)
- First-of-a-kind (FOAK) challenges resolved
 - Future AP1000 plant builds benefiting from experience from first plants



**Establishing an efficient and standard delivery platform
from eight units' worth of experience**

Sanmen 1 and Haiyang 1 Key Milestones

Sanmen 1

- Cold Hydrostatic Test completed
- Hot Functional Test underway
- Initial Fuel Load targeted for end of 2016



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Haiyang 1

- Cold Hydrostatic Test completed
- Hot Functional Test underway
- Initial Fuel Load targeted for early 2017



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U.S. Projects Key Milestones: Vogtle

Recent accomplishments:

- Unit 3 CA03 and CA02 modules set in May
- Unit 3 Shield Building course 3 panel installation, welding and NDE completed in May
- All four Unit 3 RCPs received onsite by early June
- Unit 4 CA05 module set in June
- Unit 4 CA20 module set in August



Vogtle Unit 4 CA20 Placement – August 2016



Vogtle Unit 4 CA05 Module Placement – June 2016



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U.S. Projects Key Milestones: V.C. Summer

Recent accomplishments:

- Unit 3 CA05 module set in May
- Unit 3 CH80 module set in May
- Unit 2 CA03 module set in July
- Unit 2 CA02 module set in August
- Unit 3 CA20 module set in August
- Unit 2 Reactor Vessel set in August



Unit 2 CA03 Module Placement – July 2016



Unit 2 Reactor Vessel Placement – August 2016



U.K. Project Update: Moorside (NuGen)

- Generic Design Assessment (GDA)/Licensing
 - Scheduled to receive Design Acceptance Confirmation/Statement of Design Acceptability by March 2017 from U.K. Government
 - Focused on reaching convergence and closing out GDA issues



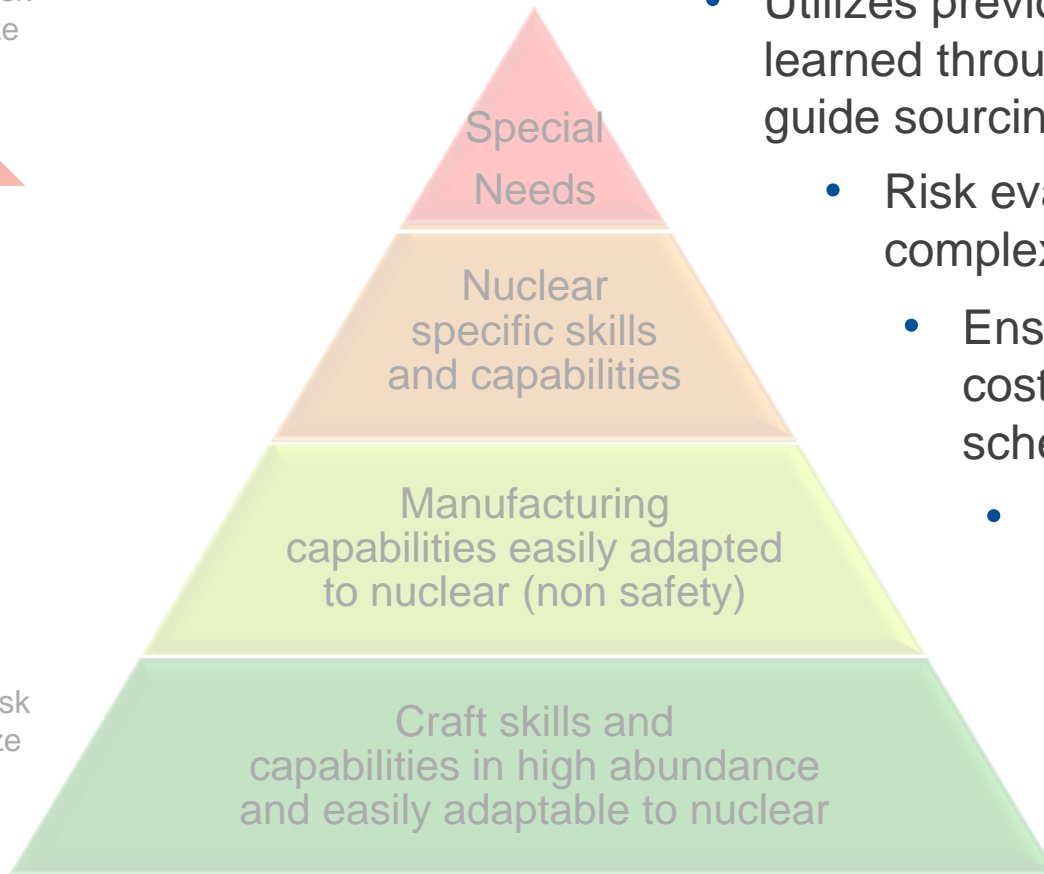
- Focus Areas
 - Project Strategy/Plans Development
 - Finalize Design Requirements
 - Preliminary Engineering
 - Developing Delivery Certainty

Future Project Risk-Informed Sourcing Model

Highest risk
to localize



Lowest risk
to localize



- Utilizes previous experience and lessons learned through existing AP1000 plants to guide sourcing decisions.
- Risk evaluation considers quality, complexity and schedule sensitivity
 - Ensures quality, reduces project costs, reduces risk, increases schedule certainty
 - A high commitment to quality is required to meet Westinghouse and nuclear standards even at the lower end of the pyramid
 - Existing capabilities will be supplemented by suitable training and investment

Export Credit Agency Basic Financing Programs

- Export Credit Agencies (“ECA”) subject to OECD Guidelines for Nuclear Projects :
 - Loan Availability – 7 to 8 Years for draw down
 - Loan Repayment – Up to 18 Years for repayment
- Export Credit Agencies (“ECA”) may make two types of loans available:
- Loan Guarantee
 - Enables international buyers to obtain loans from lenders
 - Covers 100% of commercial and political risks
 - Flexible financing options and repayment terms
 - Medium-term and Long-term financing available
 - Typically 60-80% of project coverage available
- Direct Loan
 - Enables international buyers to obtain loans from ECA
 - Medium-term and Long-term financing available
- Depending on overall structure, may be able to establish a Single Export Credit Agency for the entire project
 - Primary ECA may front the financing needs subject to Co-Financing arrangements with ECAs of the other exporting countries involved in the project
- ECA support dependent also on level of localization

Benefits of AP1000 Plant Technology and Westinghouse Approach to New-Build

- AP1000 plant combines proven technologies and innovative passive safety systems
 - 5,000 man-years of design work
- Regulatory certainty
 - Over 300 man-years of licensing review in U.S. and U.K. alone
- Eight units under construction worldwide
 - approaching Nth of a kind delivery performance
- Many more units planned giving global opportunities operating fleet advantages
- Committed to developing the next generation of engineers and other technical professionals



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Thank you!

