Westinghouse Industry Perspective
Purdue Workshop on “Future Opportunities in Nuclear Power”

Derek Ebeling-Koning
October 16, 2014
Westinghouse Electric Company

Business Structure

**Engineering, Equipment and Major Projects**
Focused on ensuring new and operating plant success by providing technically superior engineering, hardware and services that enhance plant safety, ensure plant reliability, extend plant life and improve plant performance

**Nuclear Power Plants**
Specializing in the development and delivery of new nuclear power plant projects

**Nuclear Fuel**
A single-source fuel provider for PWR, BWR, VVER and AGR reactors worldwide

**Automation and Field Services**
A global field services and instrumentation and control solutions provider, focused on delivering industry-leading operations solutions and better outage services worldwide
• Eight **AP1000** units under construction worldwide
  - Four units in China
  - Four units in the United States

Photos © Georgia Power Company; South Carolina Electric & Gas Company; Sanmen Nuclear Power Company Ltd.; Shandong Nuclear Power Company Ltd. All rights reserved.
Sanmen Site Progress: Time Lapse View

2009 to 2014
Industry Technical / Policy / Educational Challenges

Customer Drivers

• **New Plant Delivery Certainty**
  – Engineering, Procurement, and Construction

• **Zero Leakage Fuel Performance**
  – Precision analysis, manufacturing, and monitoring
  – Accident Tolerance Fuel Designs

• **Nuclear Plant Life Extension**
  – Materials, Instrumentation, and Safety Margins

• **Decontamination, Decommissioning, and Remediation**
  – Remote Capabilities in Harsh Environments

Research and Collaboration Opportunities for Purdue
Industry Technical / Policy / Educational Challenges

Industry Environment
• *Renewing Nuclear Supply Chain Capabilities*
• *Global Codes, Standards, and Regulatory Requirements*

Technical Skills
• *Working in cross-discipline, cross-cultural teams*
• *Requirements flow down and Step-wise analysis*

Industry Needs for Growth