

Reaching New Build Potential

Requires Addressing Industry Challenges Together



Presented by Dr. Aris Candris, President and CEO

Westinghouse Electric Company

The Renaissance is Here!

- With the new era of nuclear plant construction underway, sustained success will require everyone to execute flawlessly
 - From CEO's, to welders, we need to maintain focus on innovation, safety, efficiency, costs and schedule control

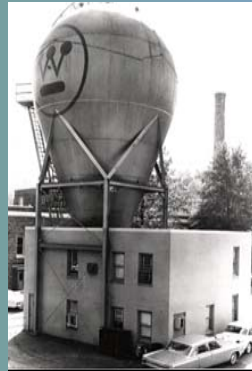


The Need for Knowledge Transfer



Explorers

1940-1956



Pioneers

1951-1960



Implementers

1960-2008



Future Leaders

2008 and Beyond

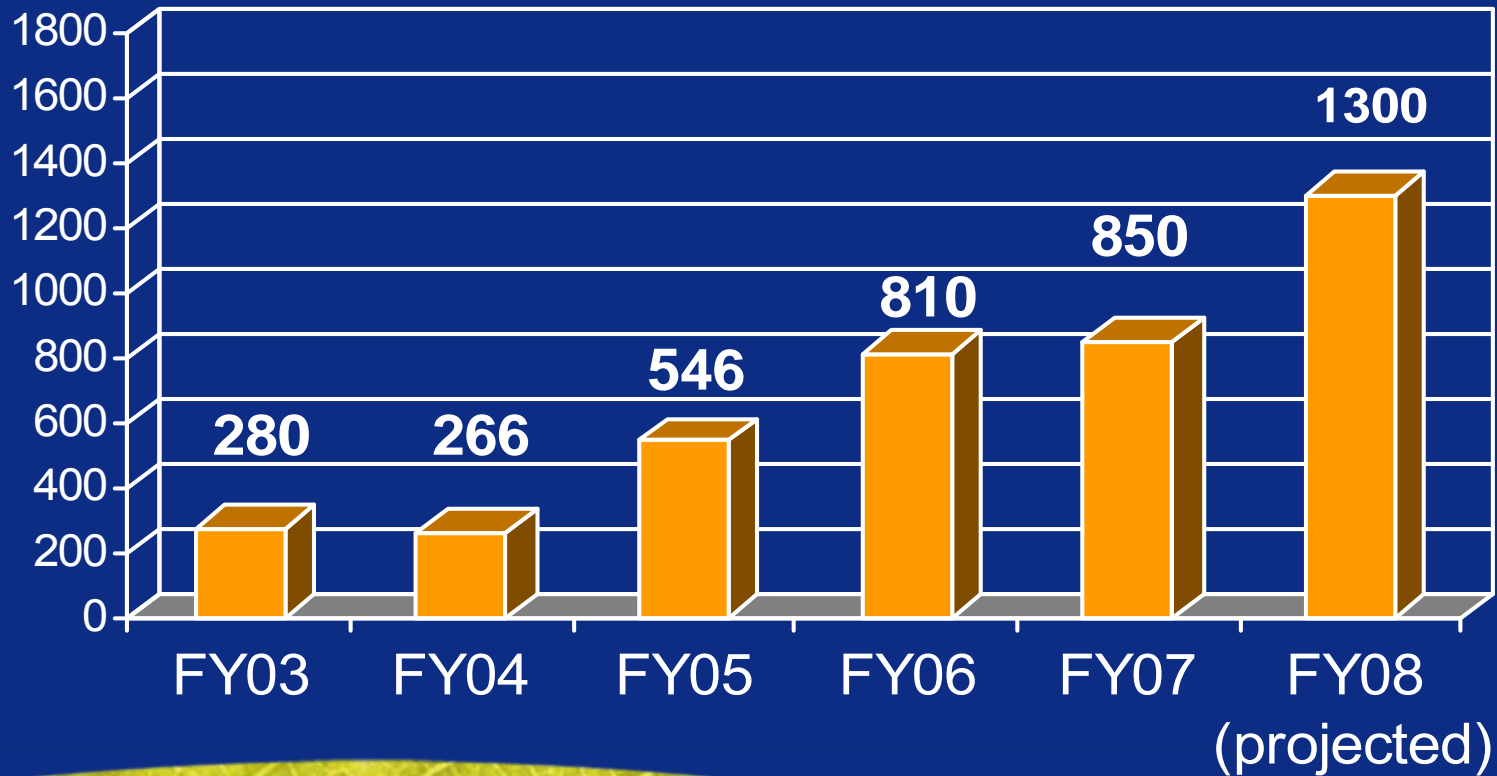
Transferring Skills and Experience To a New Generation of Workers is Critical to Success

The Need For Knowledge Transfer

- Median age of the 56,000 workers is 48 years
- 58% of engineers at nuclear utilities are over 48 years old
- 35% of the workforce could retire in the next 5 years
- Hiring was extremely low or non-existent for many years (late 1970's to early 2000's)

Hiring Has Started

Westinghouse Hiring Trend



Trade Labor Cannot Be Overlooked



- The expectation of quality work from the trade labor force is just as critical as it is in design and project management domains
- Westinghouse WEC Welding Institute and others in the industry are addressing these needs
- School graduates more than 140 certified pipe welders per year

The Shift in the Supply Chain Landscape

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

The Shift in the Supply Chain Landscape



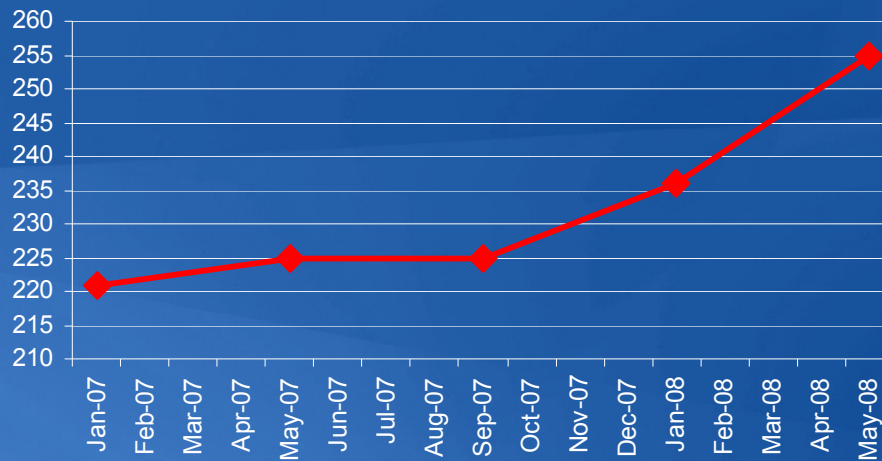
Containment Vessel Plate Fabrication at Baosteel



Heavy Component Forgings at Doosan

N-Stamp Facilities

Increases in U.S. Nuclear Certifications



Source: ASME Nuclear Committee on Accreditation, June 2008

- In mid-80's, there were 440 N-stamp facilities
- Today, there are 255 facilities, up from 220 as of January 2008.

Supply Chain Challenges

- The international supply chain must continue to be cultivated
- Suppliers are encouraged to prepare for new build
- Plant suppliers must clearly and accurately communicate business requirements to suppliers

Meeting Demand with New Relationships

- As many as 200 new plants could be built in the next 25 years
- All sectors of the industry will need to work together to ensure success.
- To address these challenges, never-before-seen partnerships are emerging

Meeting Demand with New Relationships

TOSHIBA

Design, Construction,
Component Supply,
Maintenance
& Services



Engineering,
Construction and
Manufacturing



Design, Component Supply,
Maintenance & Services, Fuel



Uranium Mining and
Supply

IHI

Manufacture and
Installation of
Nuclear Components

Promoting Global Success With Both BWR and PWR Technologies



Supply Chain Development Continues

- Shaw and Westinghouse module fabrication joint venture- **Global Modular Solutions**
- Westinghouse Electric Company is engaging local partners and local suppliers to deliver the AP1000 in the United Kingdom:
 - BAE
 - Rolls Royce
 - Doosan Babcock Energy

Public Acceptance

- We must not repeat the mistakes of the past when communicating the benefits of nuclear power.
- Today, we have a great story to tell, with a proven safety record.



An Economic Model of the World in 2042

The 100th Anniversary of Fission

- World population will have reached nine billion
- Assume an acceptable standard of living to be half that now enjoyed in Japan, or \$17,250 GDP per capita in constant dollars
- Assume that conservation and energy efficiency will cut worldwide electricity use per unit of economic output in half to 0.2 kWh

0.2 kWh/GDP X \$17,250 GDP/person X 9 billion = 31 trillion kWh

This is 2.3 times the current world electricity production of 13.5 trillion kWh

Nuclear Power is the Answer

**Let's Work Together To
Make It Happen!**

