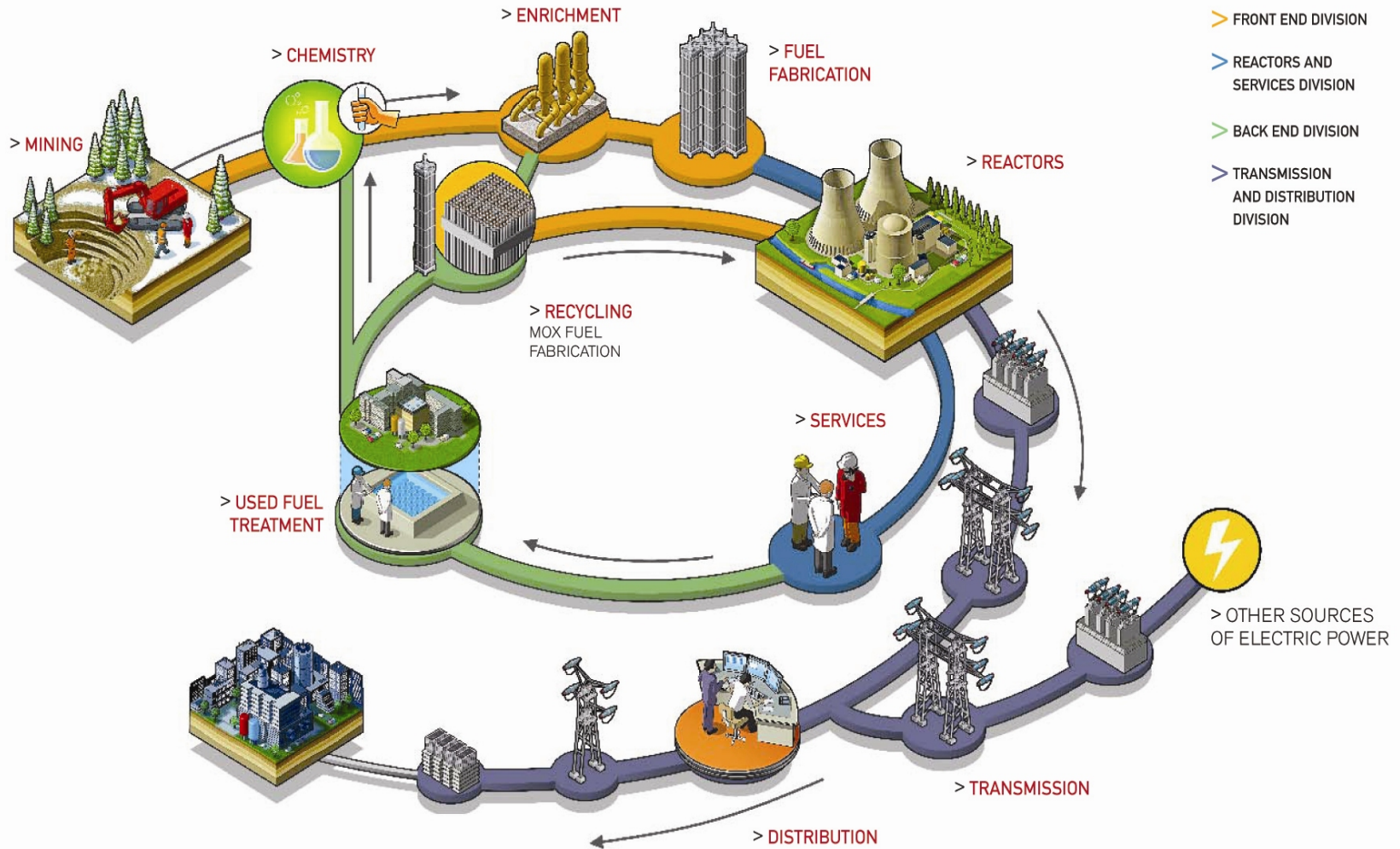


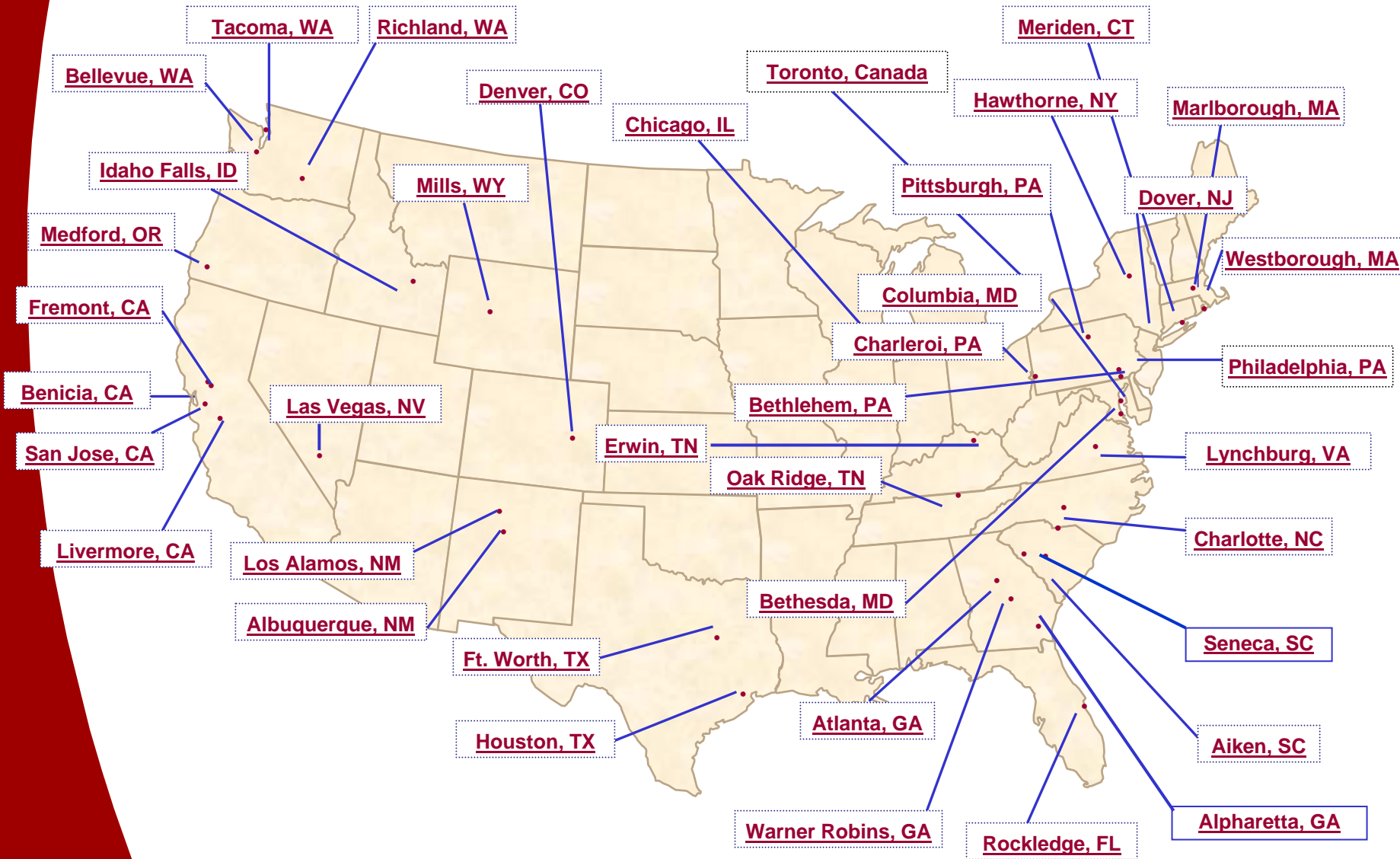
***U.S. Nuclear Industry
Life in the Fast Lane***

**Shirley Gill
Waste Management Symposia
February 26, 2007**

Energy: AREVA's Core Business



North American Locations



The Energy Highway

- ▶ **U.S. is facing dramatic challenges in energy demands**
 - ◆ **Volatile fuel costs**
 - Coal prices increased 57% in two years
 - Demand for natural gas expected to double in three years
 - ◆ **Rising electricity prices**
 - Electricity demand 3.3% last year – higher than forecast
 - Rate shocks in 10 states this year
 - ◆ **Need more energy generation**
 - ◆ **Increasing environmental obligations**
 - ◆ **Shortage of personnel**

Energy Will Be a Key Issue in the Next Political Campaign

A Major Shortfall in Nuclear Industry Resources

- ▶ **40% attrition (next five years)**
 - ◆ ~ 23,200 workers leaving
 - ◆ ~ 23% eligible for retirement *NOW*
- ▶ **Ten-year demand for workers (to 2015) – 90,000 workers**
- ▶ **Utility staffing – must hire/train:**
 - ◆ 1,400 radiation protection staff
 - ◆ 6,187 new craft workers – next five years
 - ◆ 4,736 engineers
- ▶ **Graduate and undergraduate engineering enrollment is up...is it enough?**

Ten-Year Demand For Workers (to 2015) – 90,000 Workers

Prime Time Program

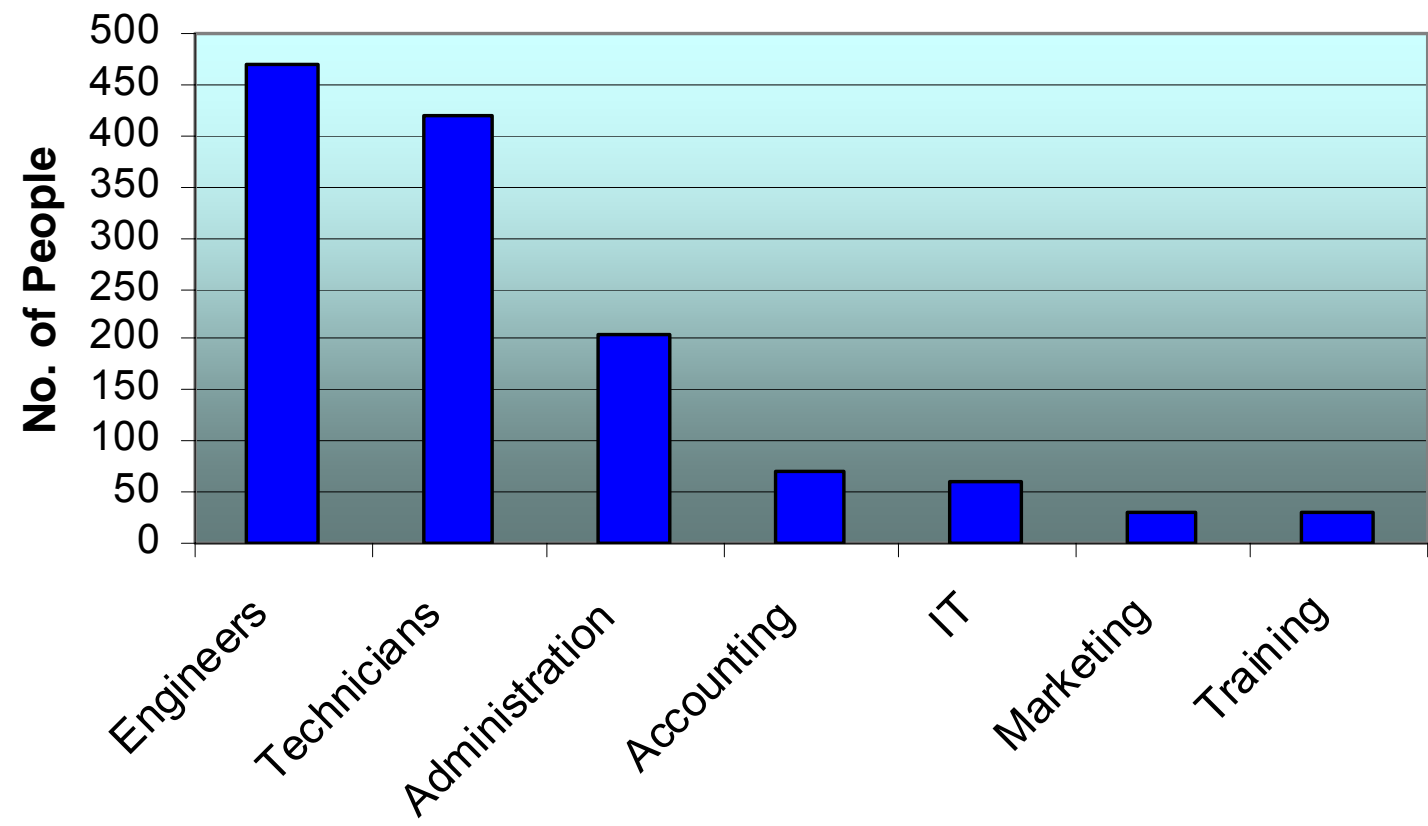
Foster a culture that recognizes and values the contributions and critical skills of prime time (age 50+) employees and facilitates their retention and recruitment in the workforce.

Focus areas:

- ▶ **Human resources and management interface**
- ▶ **Health and welfare issues**
- ▶ **Social and workshop events**
- ▶ **Financial planning tools and information**
- ▶ **Knowledge sharing**



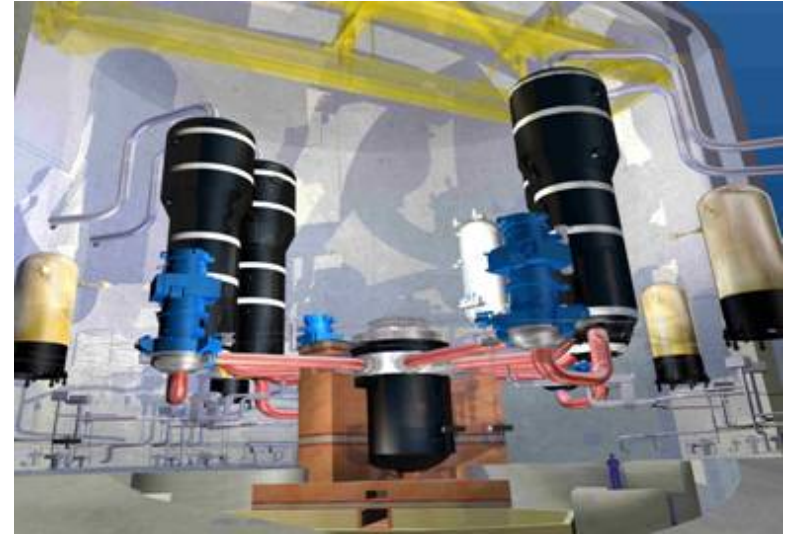
Current AREVA NP Inc. Employee Base



2006 Breakdown

Types of Engineers Supporting EPR Projects

- > **Mechanical** – fluids, heat transfer, FEM
- > **Civil** – soil interaction, earthquakes
- > **Structural** – linear and non-linear analyses
- > **Electrical** – design, diesel generators, one-lines
- > **Electronics** – digital instrumentation and control
- > **Nuclear** – neutronics, thermal/hydraulics
- > **Fire** – nuclear fire safety
- > **Materials** – fatigue, stress, FEM
- > **Construction** (just starting)



Olkiluoto 3 RV head manufacturing

AREVA Will Continue to Need New Employees

Current openings end of 2006 – 228

Total Full-Time Hires

	Dec. 2006	Total 2006
Internal Hires	8	225
External Hires	25	337
Total Hires	33	562



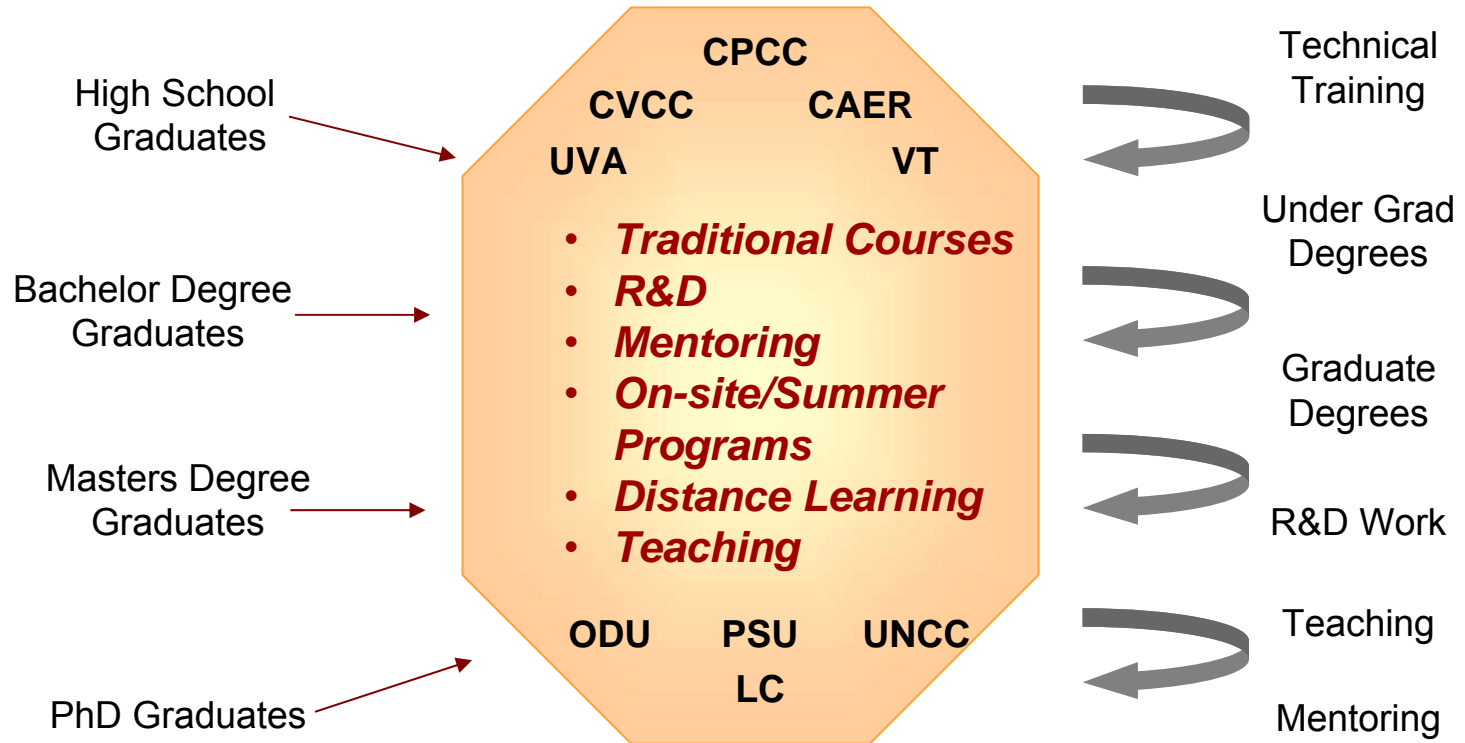
***New Hires Needed
by 2010 = 1000***

What We're Doing to Attract New Employees

- ▶ **Central Virginia Community College Joint Training Program**
 - ◆ Established in 2002
- ▶ **AREVA Technical Center**
 - ◆ Local residents earn while they learn
 - ◆ Associate degree in nuclear technology
 - ◆ Features classroom and hands-on experience in our training center
- ▶ **Junior Achievement**
- ▶ **First Robotics Competition**
- ▶ **Partners in Education**
- ▶ **CVGS Mentor Program**
- ▶ **Middle School Academy**
- ▶ **Explorer's Project**



Provide access to educational opportunities for all levels of employees throughout their careers



New programs and partnerships enable increased recruitment and retention of technical/engineering talent

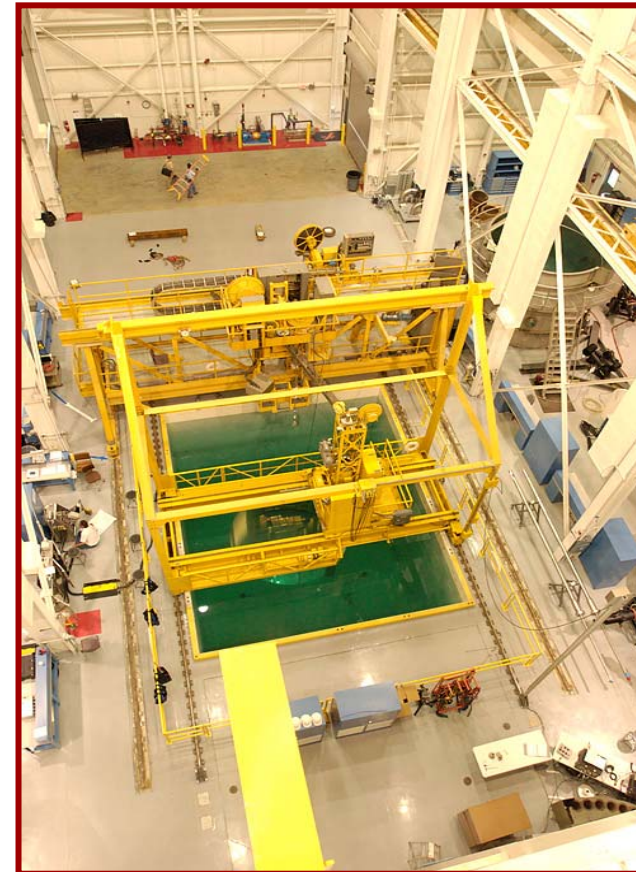
What We're Doing to Support Universities

- ▶ **College Intern Program**
 - ◆ 55 college students served as interns in 2006
 - 90% of those offered employment have accepted
- ▶ **College Scholarships**
 - ◆ AREVA Dependent Scholarships
 - ◆ UniStar Scholarship Program
 - ◆ Supporting students' Master's Program
- ▶ **University Sponsorships**
 - ◆ DOE Matching Grant
- ▶ **University Projects**
 - ◆ NERI
 - ◆ Center for Advanced Energy Studies
- ▶ **ANS Student Conference Sponsor**
- ▶ **Dedicated University Recruiting Program**



AREVA Invests in Technologically Advanced Facilities

- ▶ **BLEU facilities in Erwin, TN and Richland, WA** **\$57M**
- ▶ **Recent fuel line upgrades** **\$50M**
- ▶ **AREVA Training Center** **\$ 3.5M**
- ▶ **Pump and Motor Center** **\$12M**
- ▶ **Heavy component manufacturing expansion** **\$38.5M**



AREVA: Developing New Technologies as Well as Growing the Industry for the Future



- ▶ **Building an Evolutionary Pressurized Reactor (EPR) in Finland**
 - ◆ Start second EPR in France in 2007
- ▶ **Licensing US EPR – NRC approval December 2008**
- ▶ **Rebuilding the US infrastructure**
- ▶ **Constructing mixed oxide (MOX) fuel facility in Savannah – AREVA and Shaw consortium**
- ▶ **Developing a high temperature reactor**
- ▶ **Developing an advanced burner reactor**
- ▶ **Recycling of Fuel in U.S. – Global Nuclear Energy Partnership (GNEP)**

In Summary – It's an Exciting and Challenging Time

- ▶ **This is a critical time in the energy generation industry**
- ▶ **We face greater economic and environmental challenges than ever before**
- ▶ **Success depends on:**
 - ◆ **Creating exciting work**
 - ◆ **Approaching workforce issue – creatively**
 - ◆ **Retaining institutional knowledge**
 - ◆ **Engaging a new generation of “employees”**

Our Business Is Growing – Our Employees are Our Most Valued Asset

Working with Tomorrow's Leaders



Management Contractor for DOE's
Oak Ridge National Laboratory

PENNSTATE

