

Nuclear Energy Today and Tomorrow

**Alex Marion
Vice President – Special Projects
Nuclear Energy Institute**

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Overview

- **Nuclear energy outlook**
- **Lessons from Fukushima**
- **Public opinion**
- **Focus areas for 2012-2013**
- **Where to learn more**

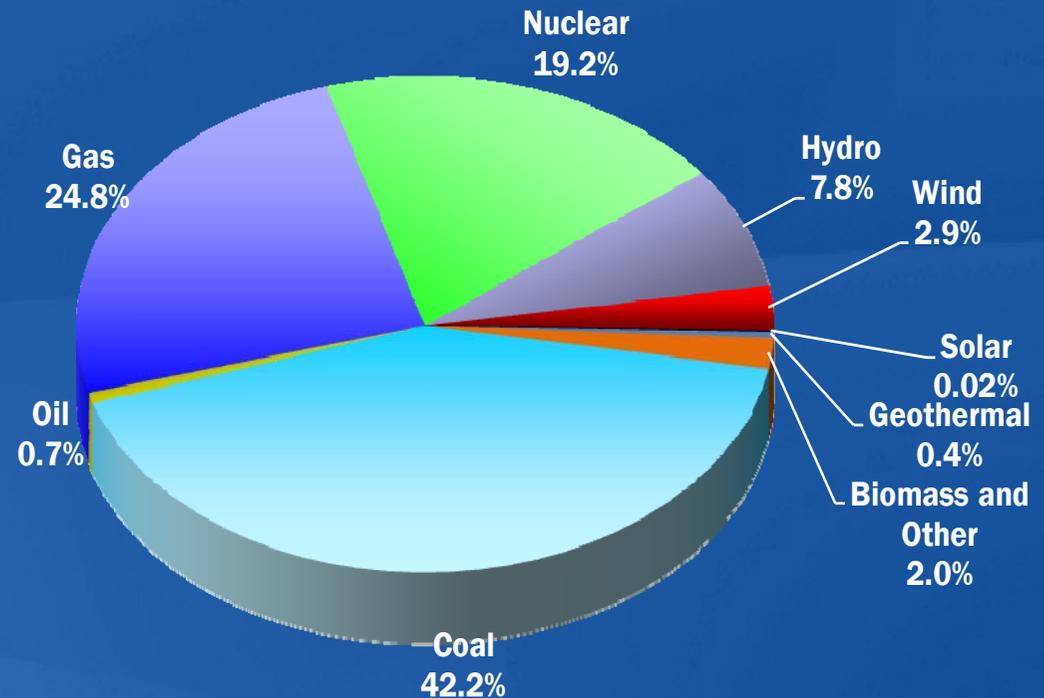
Nuclear Energy Outlook

- **Clean air electricity**
- **Affordable and reliable**
- **Safe and secure**
- **Economically beneficial**



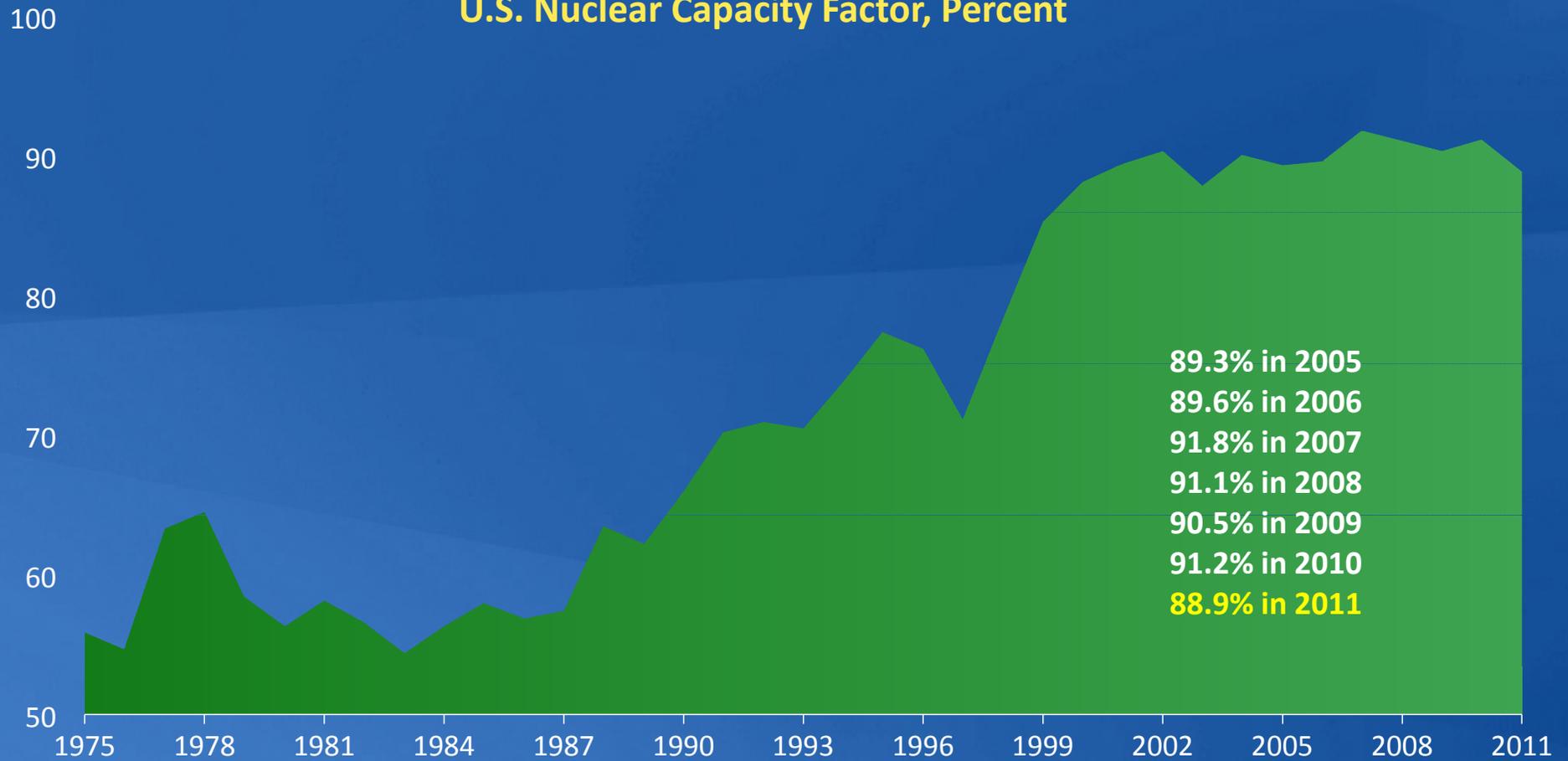
U.S. Energy Portfolio

- U.S. electricity needs are forecast to grow by 22% by 2035
- Nuclear energy provides reliable baseload power and is one of the lowest-cost sources of electricity available today



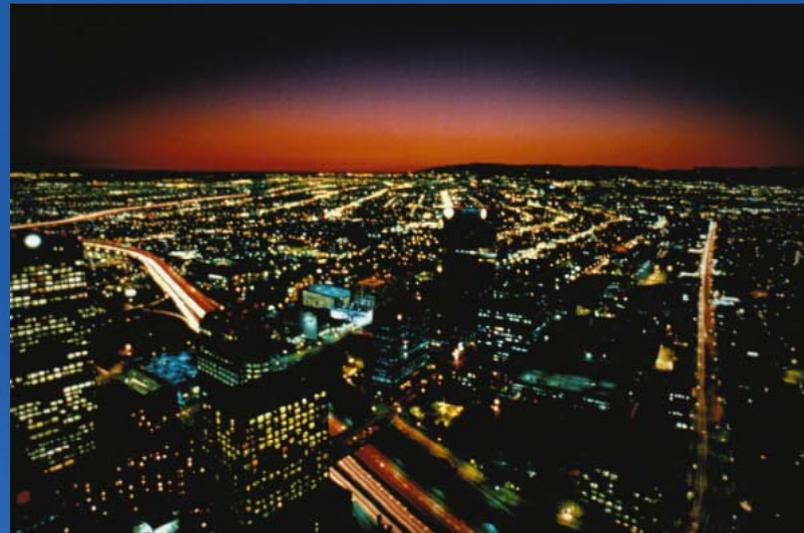
Snapshot of U.S. Nuclear Performance

U.S. Nuclear Capacity Factor, Percent



Jobs and Economic Growth

- More than 100,000 high-paying, American jobs
- \$40 billion to \$50 billion in electricity sales and revenue each year



New Reactor Projects In Georgia and South Carolina



Vogtle 3 & 4

Photo courtesy Southern Company



Summer 2&3

Photo courtesy SCANA

Development of Small Reactors

- **Small, scalable reactor designs—45 to 300 megawatts capacity**
- **Clean nuclear energy for diverse applications**
 - **Could provide electricity for universities, large industrial plants, military bases**
 - **Replace older coal-fired facilities**
- **Create jobs by reestablishing domestic manufacturing for global deployment**

U.S. Participation in World Nuclear Energy Market Supports U.S. Strategic Objectives

- **U.S. technology among the most innovative – e.g., the only “passive safety” designs**
- **Participation in the world market enhances U.S. ability to achieve nonproliferation goals, export safety practices**
- **NRC approval of reactor designs considered the gold standard**
- **Global sales will create thousands of jobs**
 - **Manufacture key components and fuel**
 - **Provide design, engineering and other services**

Layers of Safety



Public Opinion Recovering

- **Public support has stabilized:**
 - **February 2011: 71%**
 - **April 2011: 46%**
 - **February 2012: 64%**
- **82% agree U.S. should learn from Japan and license new plants rather than stop progress entirely**
- **65% said it would be acceptable to build a new reactor at the nuclear energy facility closest to where they live**



Sources: *Bisconti Research Inc./GfK Roper February 2011, February 2012*
Luntz Global April 2011

Focus Areas for 2012-2013

- **Maintain safe operations, implement lessons learned from Fukushima**
- **Encourage effective regulatory environment**
- **New trade policy to increase exports of nuclear energy goods and services**
- **New and sustainable program for used nuclear fuel management**
- **New reactor development**
 - **Continue construction on five new plants**
 - **Continue NRC licensing of small modular reactors**
 - **Continue NRC reviews of large plant designs and COL applications**

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