

# Proactive Communications Builds Confidence in Nuclear Energy Safety

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## Today's Presentation

- Focus on communications challenges and lessons learned regarding nuclear safety
  1. Immediate response
  2. Safety enhancements at U.S. reactors
  3. Restoring public confidence and communicating nuclear energy's benefits
- Safety enhancements at U.S. reactors

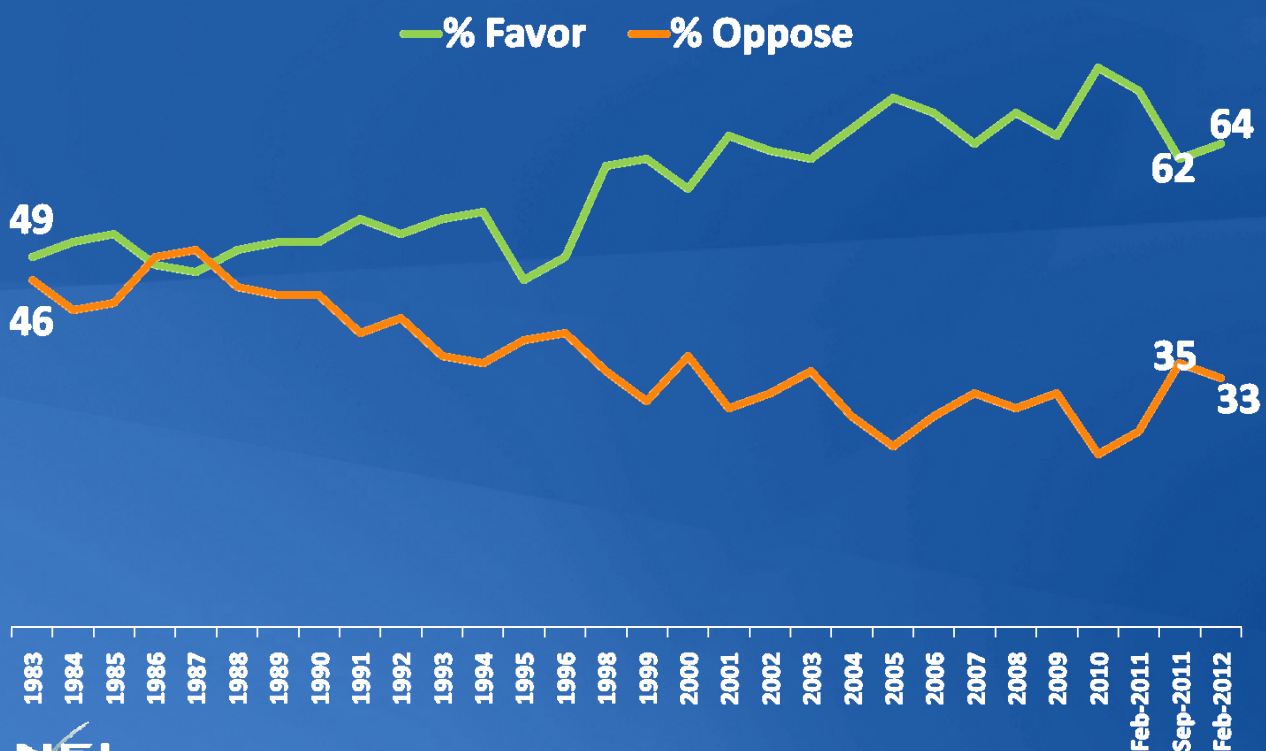


## Lessons Learned from U.S. Industry Response to Fukushima Dai-ichi

- Ensure that information protocols are in place and well understood
- Recognize the speed of information sharing and use the Internet and social media to your advantage
- Quickly establish credibility with policymakers

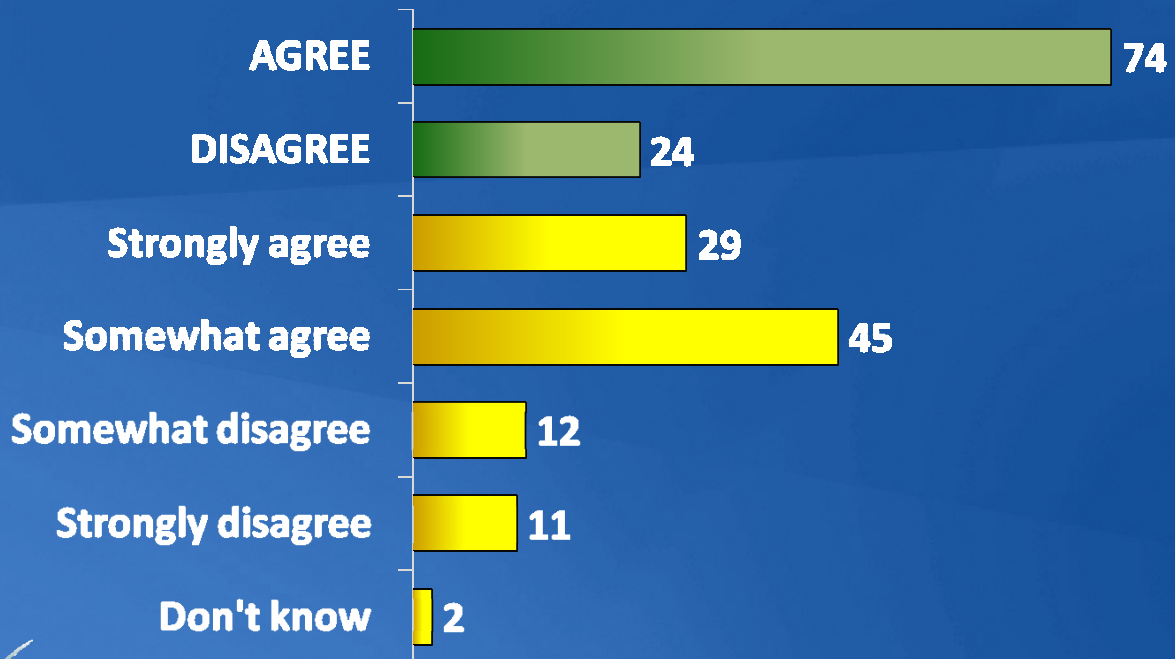


## U.S. Favorability to Nuclear Energy



Bisconti Research, Inc. with GfK Roper survey of 1,000 U.S. adults, February 2012

## Perception that U.S. Nuclear Energy Facilities are "Safe and Secure"



*Bisconti Research, Inc. with GfK Roper survey of 1,000 U.S. adults, February 2012*

## U.S. Industry Goals

- Continue safe, reliable reactor operation
- Effectively implement lessons learned from Fukushima Dai-ichi
- Attain greatest safety benefit in shortest timeframe
- Recover public confidence in nuclear energy



# Flexible, Diverse Safety Approach

**MAKING SAFE NUCLEAR ENERGY SAFER AFTER FUKUSHIMA**

FLEX is a flexible and diverse strategy developed by the nuclear energy industry to quickly and effectively implement the Nuclear Regulatory Commission (NRC's) Fukushima task force recommendations. The FLEX protection strategy addresses the main safety problems at Fukushima—the loss of cooling capability and electrical power resulting from a severe natural event that exceeded the plant's design basis—to make U.S. facilities even safer. It builds on safety steps taken by industry during the past three decades by providing a fast, effective and efficient way to apply the lessons learned from Japan's experience.

**MULTIPLE LAYERS OF POWER SUPPLY**

Backup generators provide reliable electrical power and cooling capability if an extreme event disables the normal plant equipment. Additional battery banks provide reliable electrical power and cooling capability if an extreme event disrupts regular and other backup power supply.

- Diesel Generators:** Minimum of two at each reactor.
- Battery Bank:** Additional batteries added in 1988.
- Dedicated Backup Power from Another Plant:** Added in 2002 and more are being added now.
- Portable Backup Generators:** Added in 2002 and more are being added now.

**ADDITIONAL SPENT FUEL MONITORING**

Additional equipment in spent fuel storage pools will provide another layer of monitoring to ensure temperature and water levels are maintained.

**ADDITIONAL PUMPS**

To ensure cooling procedures are maintained during and after an extreme event, additional pumps can supply water where needed.

**PREPARING OUR PEOPLE**

Nuclear plant and emergency response personnel will use the FLEX approach to support the key safety functions across multiple reactors. Capabilities and training will be verified for nuclear plant workers to assure the continued viability and reliability of equipment. Communications capabilities will be expanded to include satellite phones and equipment to connect personnel at the plants with government emergency communications networks. Specific strategies include the following:

- Enhanced Training:** Represented by an icon of a person at a computer screen.
- Expanded Maintenance and Testing of Equipment:** Represented by an icon of a wrench and a control panel.
- Satellite Communications:** Represented by an icon of a satellite and a mobile phone.

**REGIONAL CENTERS**

Additional emergency equipment will be stationed in offsite support centers to provide another layer of safety and ensure prolonged reliable operation.

**PUBLIC OPINION**

- 74%** of Americans believe that U.S. nuclear power plants are safe and secure.
- 80%** of Americans believe U.S. nuclear power plants have been made safer as we've learned from experience and added technology.

**NEI**

## Independent Regulator Boosts Public Confidence in Nuclear Energy

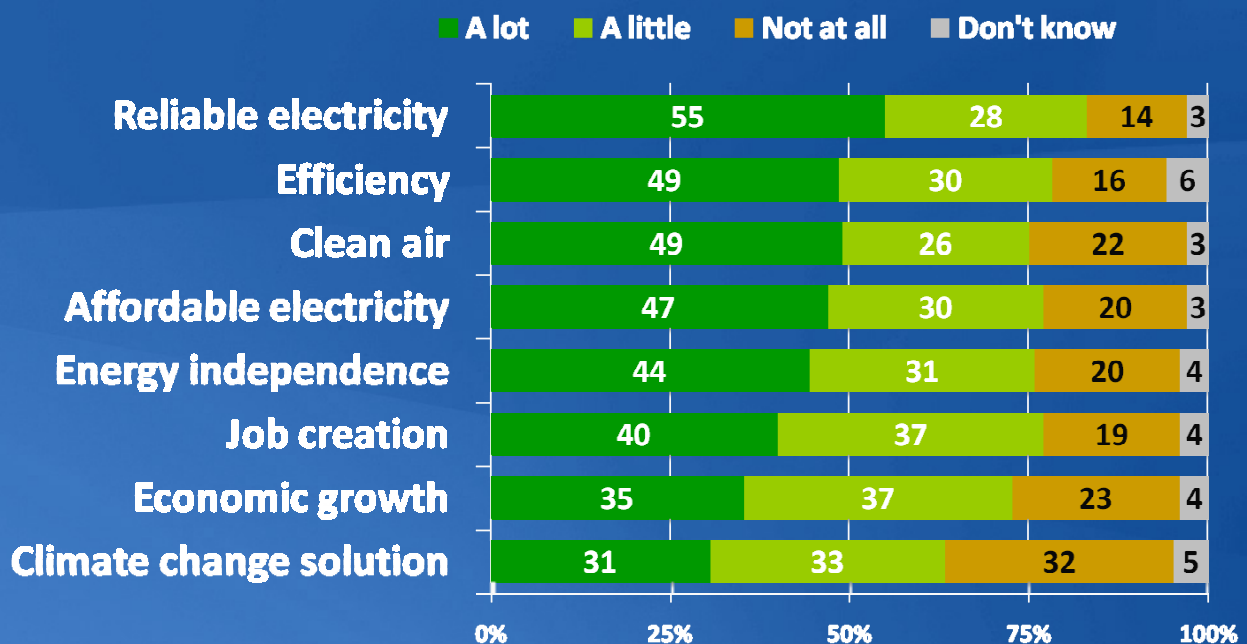
- Independent NRC inspections at U.S. reactors
- NRC task force develops new safety requirements
- Public stakeholder participation
- Government oversight

## Maintaining Nuclear Energy's Relevance in Global Energy Portfolio

- Proactively communicate the benefits of nuclear energy along with safety enhancements
- Reestablish credibility regarding safety
- Communicate need for nuclear energy and other low-carbon options to meet energy needs of a growing population and electrification of the global economy



## Association of Nuclear Energy with Benefits (%)



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