

American Nuclear Energy

*Meeting the Today's Challenges,
Seizing Opportunities for the Future*

*50th Annual JAIF Conference
Japan Atomic Industrial Forum
Tokyo, Japan
April 11, 2017*

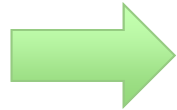
No, I am not Maria Korsnick



Time of Opportunities and Challenges

Strengths

- Industry reliability, safety
- New reactors/ SMRS/advanced reactors
- Carbon conversation



Opportunity to Influence

- New President/ Administration
- New Congress
- New governors & state legislators
- Drive support for policy priorities, e.g. used fuel policy



Challenges

- Reactor closures (markets)
- Low energy demand
- Depressed electricity prices



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nuclear. clean air energy.

Sustained Reliability and Productivity

2016 CAPACITY FACTOR

> 90%



Source: Energy Information Administration
Updated: 2017

* - Estimated in NEI Nuclear Performance Monthly



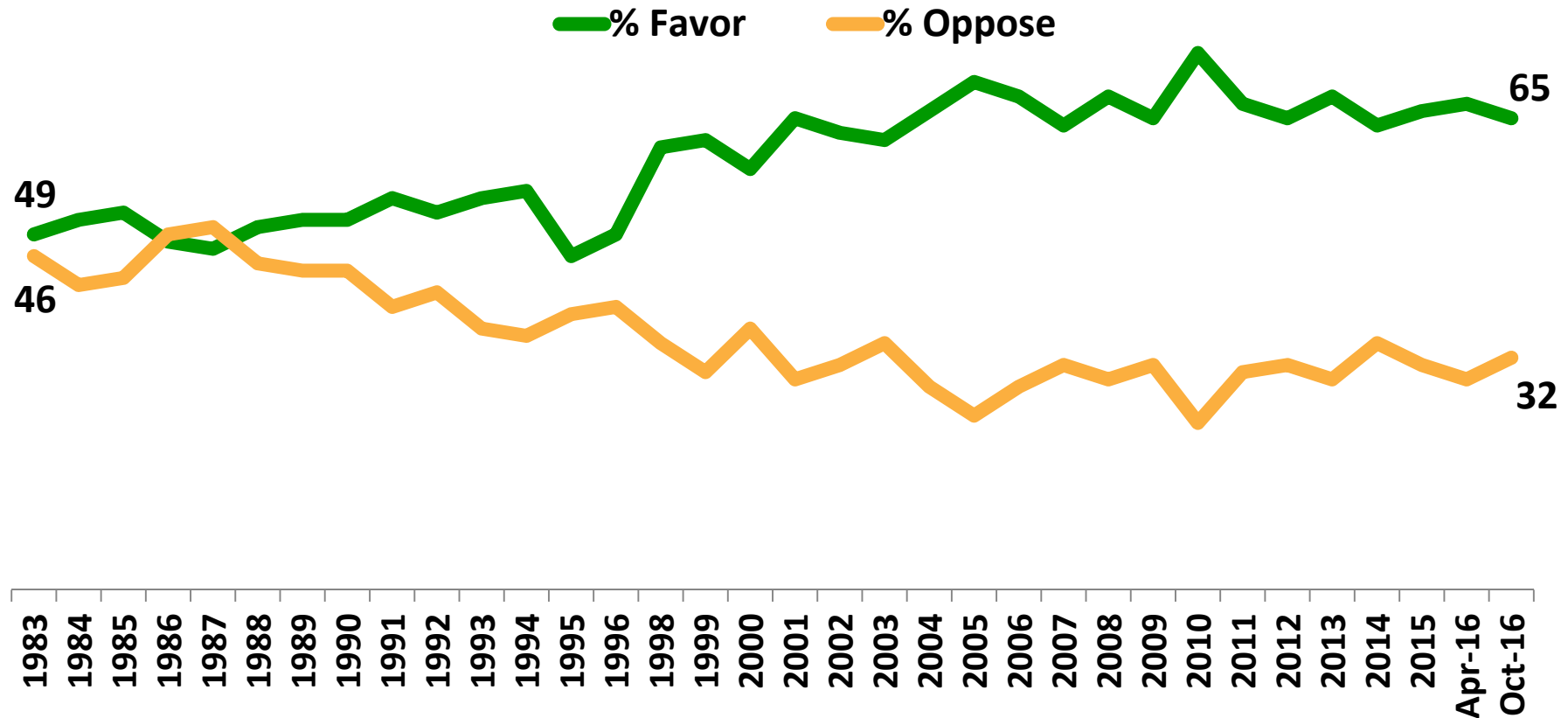
Source: Energy Information Administration
Updated: 4/16

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Favorability to Nuclear Energy

Overall, do you strongly favor, somewhat favor, somewhat oppose, or strongly oppose the use of nuclear energy as one of the ways to provide electricity in the United States? (%)



Bisconti Research, Inc. with Quest Global Research, national public opinion, October 2016

Challenges Persist for Nuclear Sector

- Five reactors shut down prematurely since 2013
- Many others are at risk of early closure due to:
 - Slow electricity demand growth
 - Low natural gas prices
 - Subsidized wind and solar
- Measures in New York, Illinois helped save five reactors



Delivering the Nuclear Promise

Delivering the Nuclear Promise is an industrywide effort to :

- Strengthen our commitment to excellence in safety and reliability
- Improve efficiency
- Drive regulatory and market changes

DELIVERING THE **NUCLEAR PROMISE**



\$650 MILLION
POTENTIAL SAVINGS



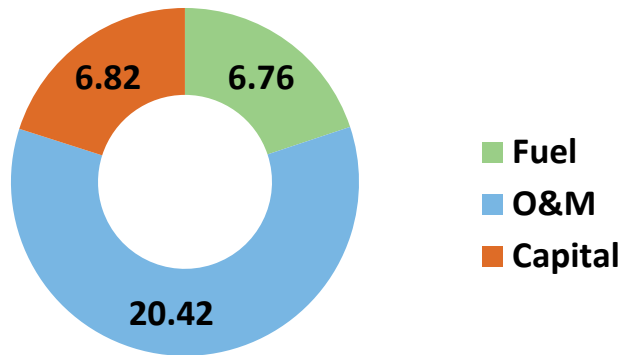
“Knowledge is not skill. Knowledge plus ten thousand is skill.”
—*Shinichi Suzuki*

Snapshot of 2016 U.S. Nuclear Plant Costs

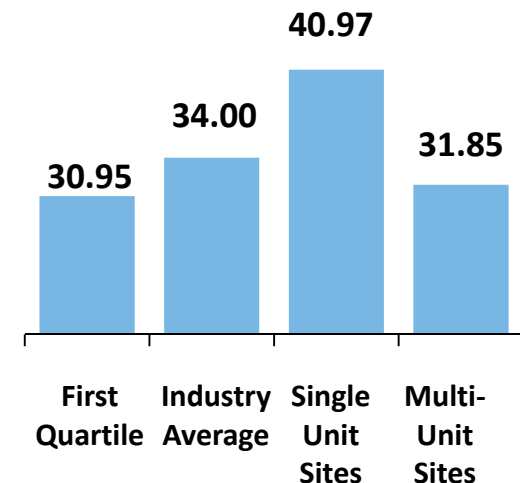
(\$ per MWh)

- Average generating costs have decreased from peak of \$40.25/MWh in 2012 to \$34.00/MWh in 2016.
- Average generating costs have decreased 6% from 2015.
- Capital spending down 15% from 2015, and 38% from 2012 peak.
- \$5.45 billion in 2016 capex.

2016 Generating Cost

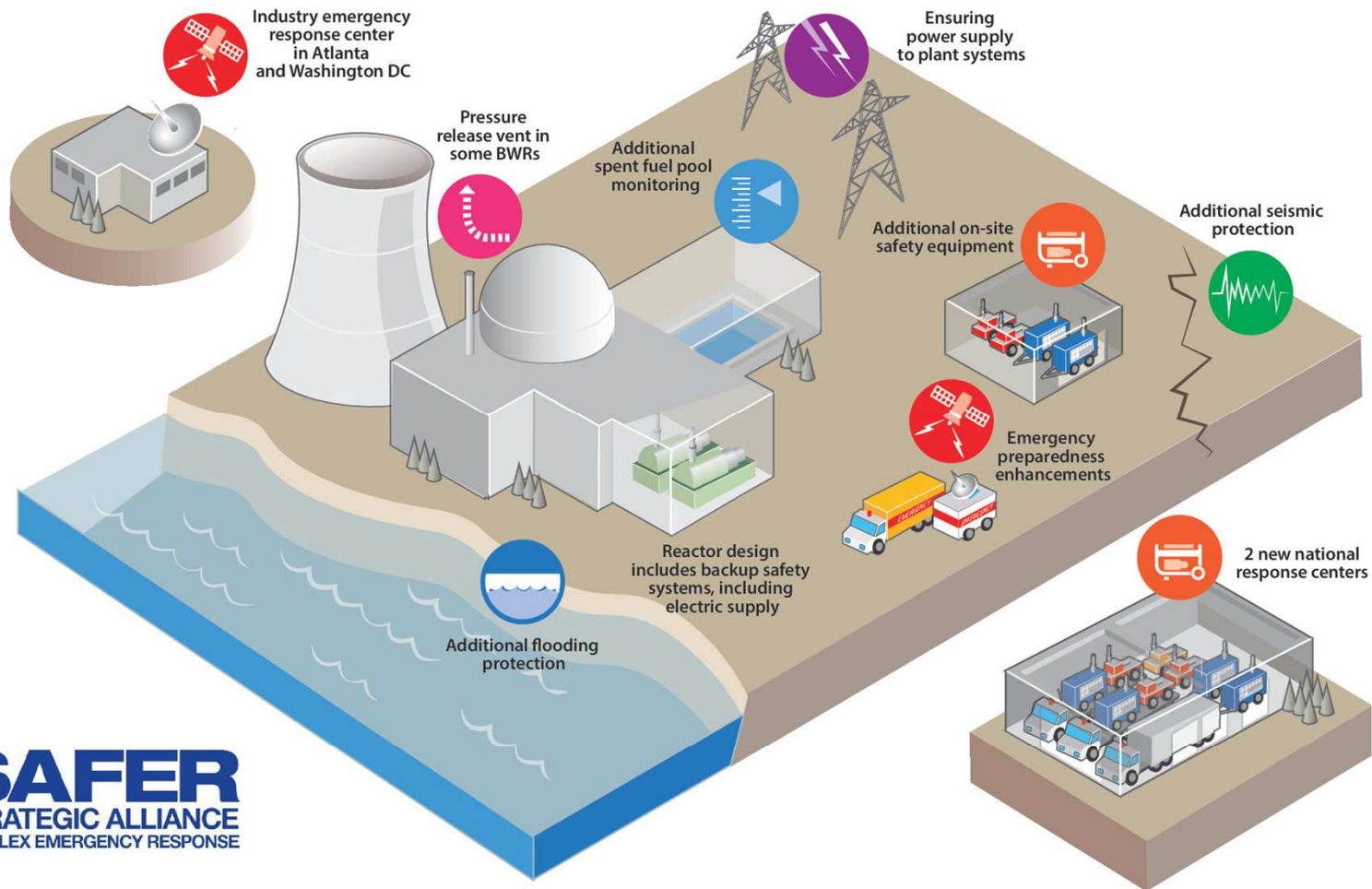


2016 Average Generating Costs



Total generating cost = fuel + capital + operating.
Source: Electric Utility Cost Group.

Post-Fukushima Safety Enhancements at U.S. Reactors



New Reactors Under Construction

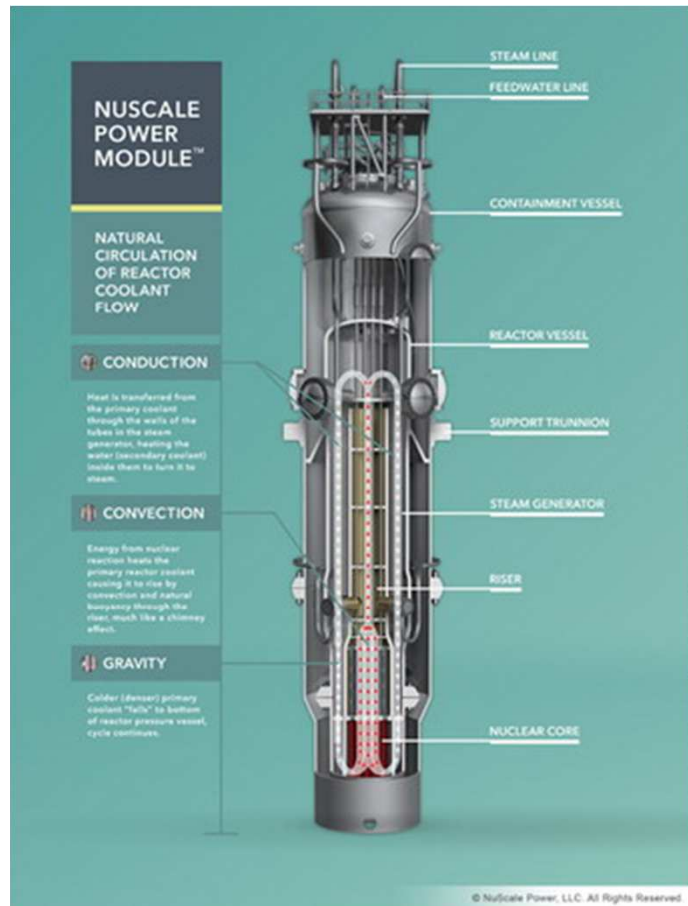


Georgia
Vogtle 3 and 4



South Carolina
V.C. Summer 2 and 3

Advancing SMRs, Next-Generation Reactors

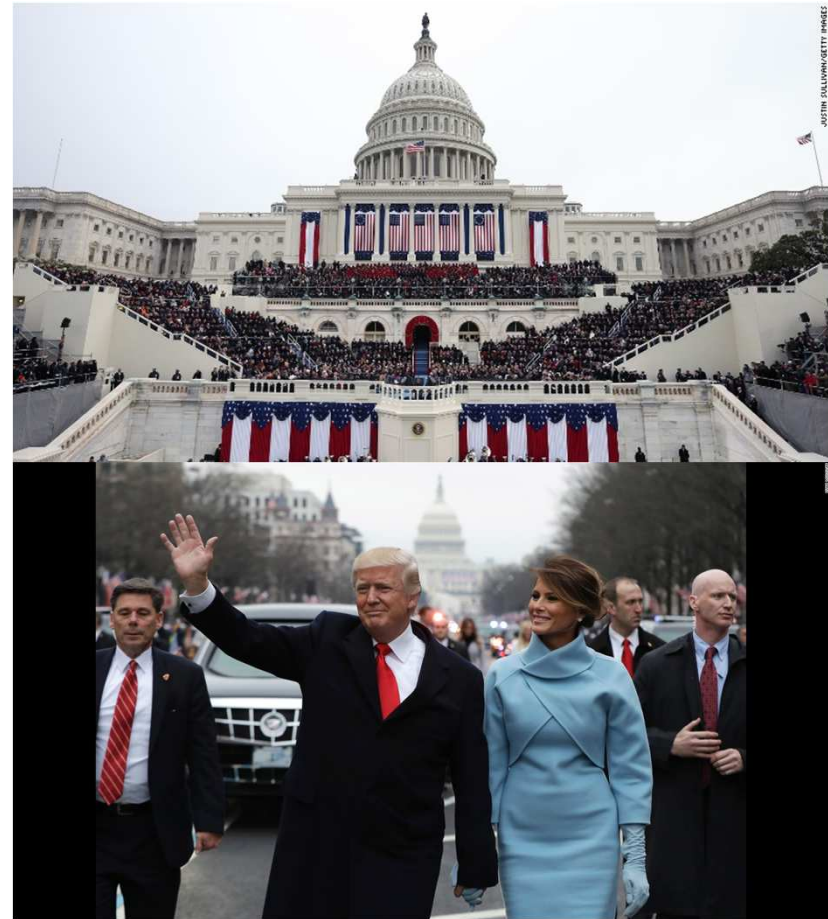


NUCLEAR REACTORS OF THE FUTURE



New Government, New Opportunities

- Infrastructure and jobs are high priorities for the new Administration
- Nuclear energy is essential part of America's critical infrastructure
- Must preserve existing nuclear, encourage new investments
- New nuclear projects create thousands of jobs



Photos: CNN

Committed to Our International Partnerships

- For more than 60 years, U.S. has partnered with many countries to develop civil nuclear energy sectors
- U.S. nuclear sector covers full range of products and services, including innovative new technology
- We remain committed to our international partnerships and open to new opportunities.



New Growth on the Horizon



Photo: Georgia Power Co.

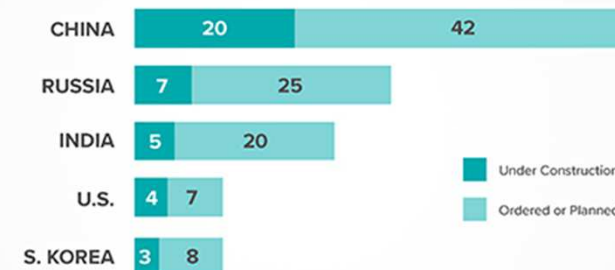
GLOBAL FUTURE

**80% INCREASE IN
ELECTRICITY GENERATION
FROM
NUCLEAR POWER WORLDWIDE
BY 2040**

The 2016 World Energy Outlook from the International Energy Agency



NEW REACTORS WORLDWIDE



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