

2014 New Generation Financial Survey

US Department of Energy, Office of Nuclear Energy
November 12, 2014
Washington, D.C.

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2014 New Generation Financial Survey

7th Annual Survey

- Conducted May-June
- Nuclear, Natural Gas, Coal, Wind, Solar and Related Issues
- Conducted by Lacy Consulting Group and Chappaqua Capital Consultants

51 In-depth Interviews

- Commercial Bankers
- Investment Bankers
- Debt and Equity Investors
- Rating Agencies
- Private Equity

Wall Street Is Not Monolithic



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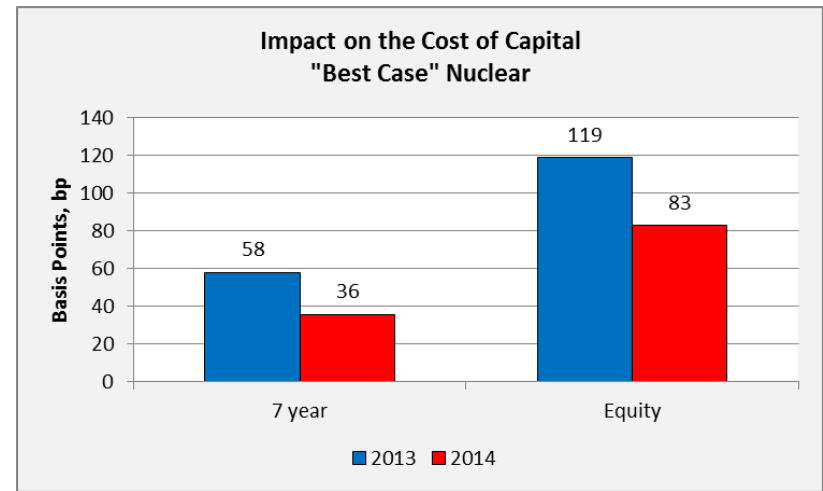
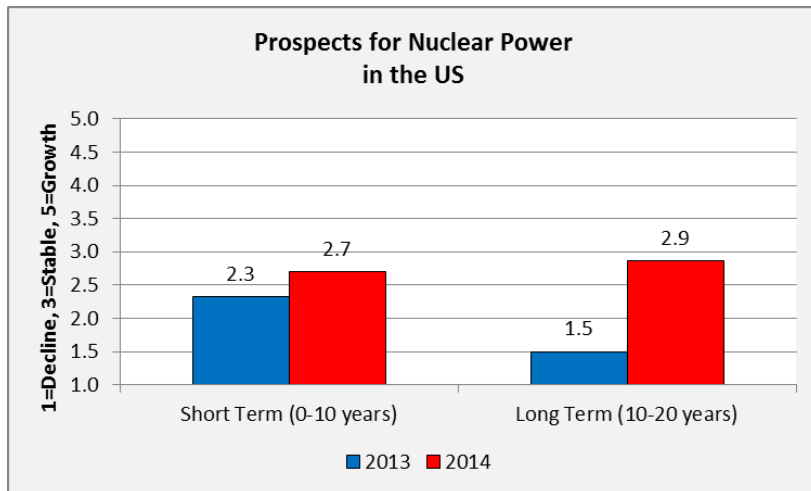
Summary

- Wall Street attitudes toward nuclear energy are generally favorable/improving
- But nuclear energy is losing ground in Wall Street's perception of its role in the future due to natural gas and renewables, particularly roof top solar
- Wall Street is making up its mind toward Small Modular Reactors

Favorable/Improving Attitudes Toward Nuclear Energy

Q – What is your view on the prospects for nuclear power in the US?

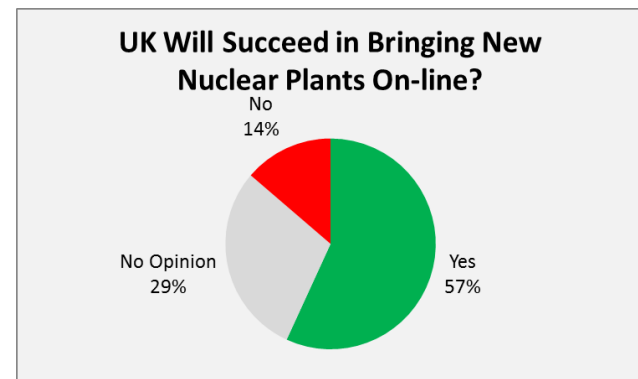
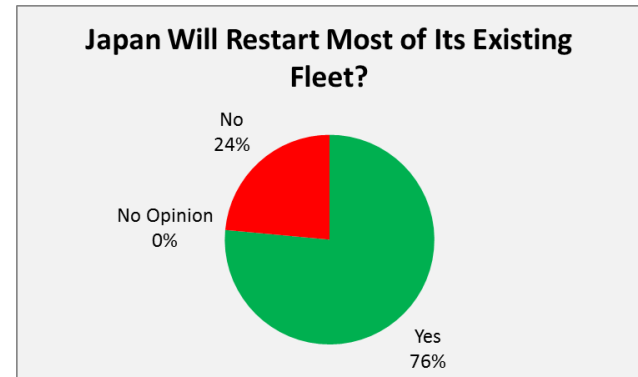
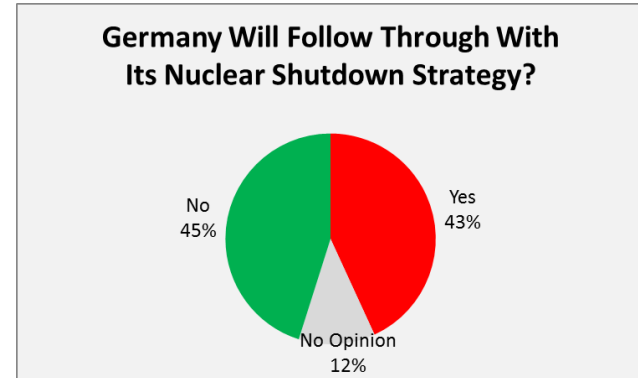
Q – What will be the impact on the cost of capital for a utility replacing 500 MWs of Coal capacity with a 495 MW, 45% interest in a neighboring utility's AP 1000 project



Germany, Japan and UK Barometers of Wall Street attitudes toward nuclear

Q – The March 2011 event at Fukushima has resulted in a German commitment to shut down all nuclear plants and an intense debate in Japan over the possibility of restarting nuclear plants.

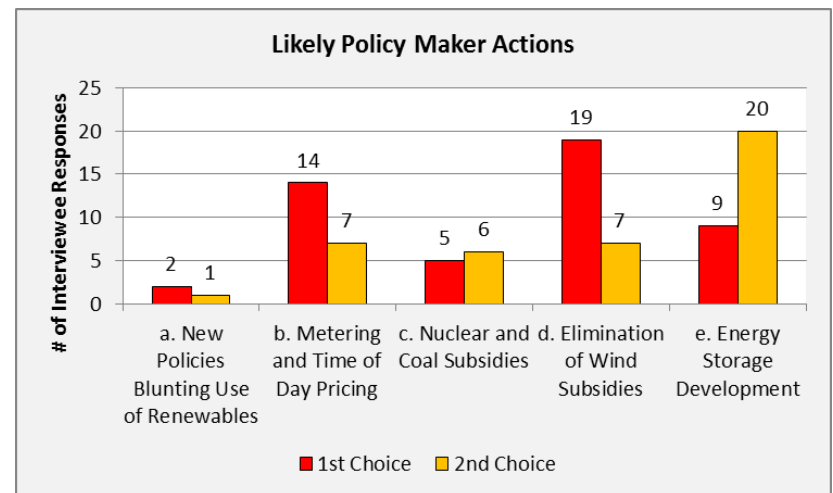
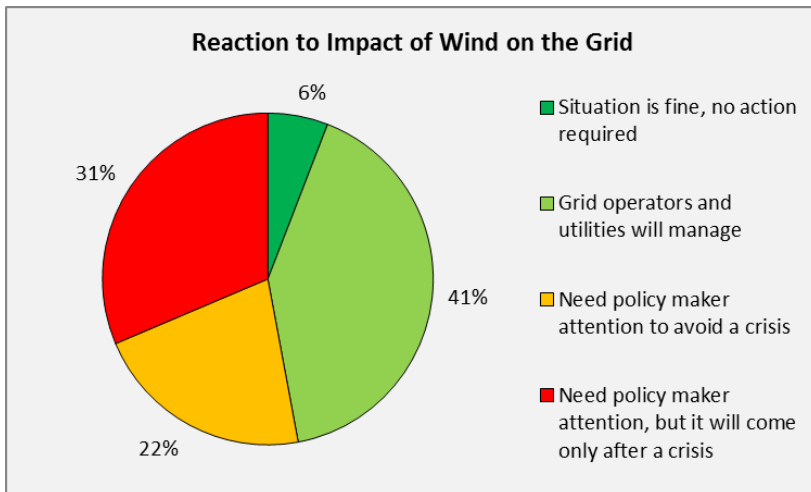
What do you expect to occur in Germany, Japan, and with the UK's new build effort?



Wind, the Grid, and Nuclear

Q – Support for Wind, motivated by concerns over CO2 emissions, also results in supply uncorrelated with demand, increased need for flexible back up supply, and displacement of base load. Please describe your reaction to this situation.

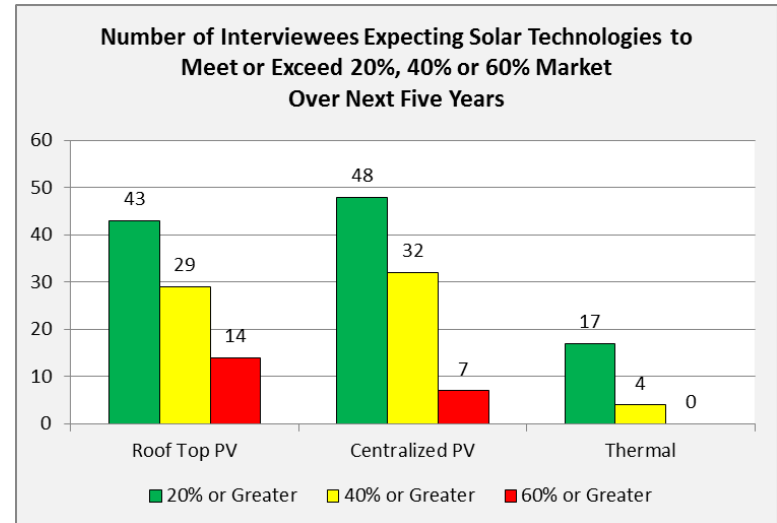
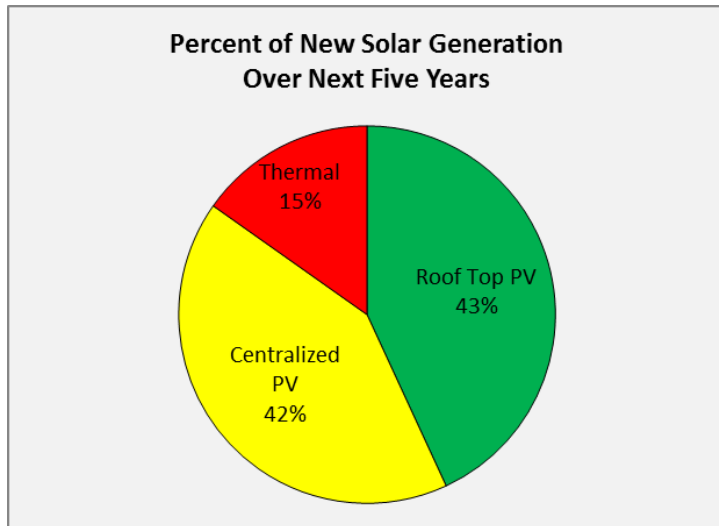
Q – If you think specific actions by policy makers are warranted, please select the two statements that best describe what you see as likely actions.



Solar Energy

Photovoltaics, Roof Top in particular

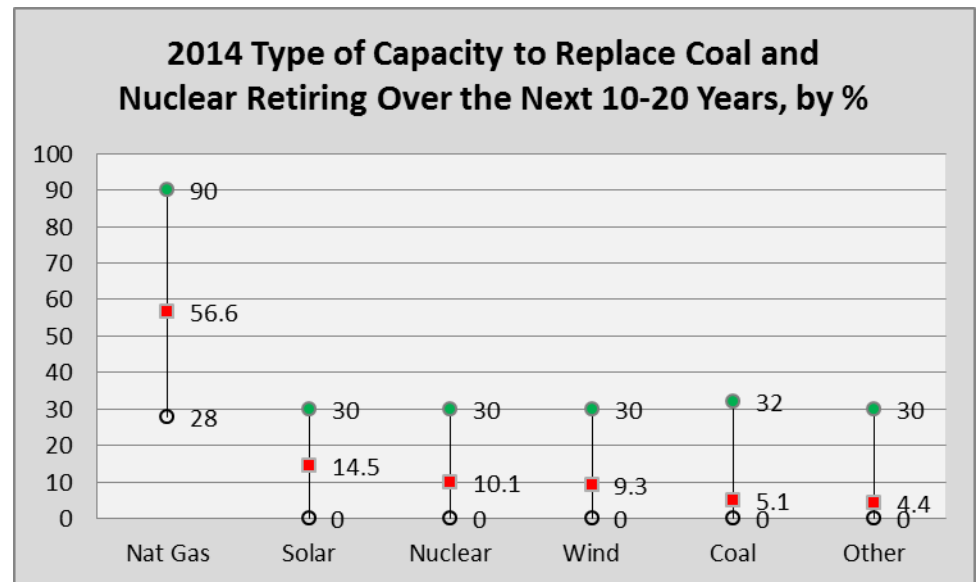
Q – By percent, what will be the sources of new solar electric generation over the next five years?



Long Term Capacity for the US

Wall Street is expecting the future to look different

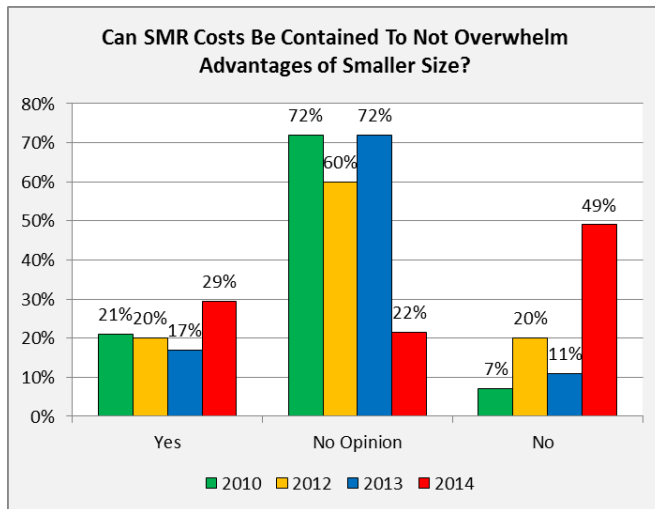
Q – What is your expectation for the long term (10-20 years) allocation by type of generation to replace existing US base load generation assets, e.g. coal and nuclear assets, as coal plants are shut down and nuclear plant licenses expire?



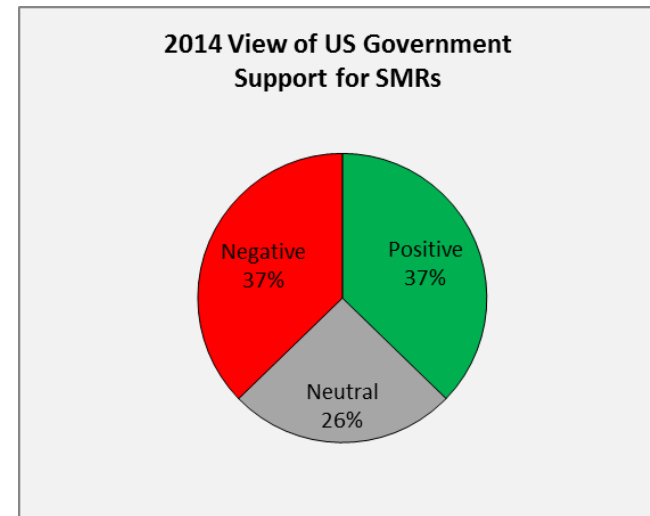
Small Modular Reactors

Wall Street is making up its mind, for now

Q – Do you believe the costs of SMRs can be contained such that those costs do not overwhelm the potential advantages associated with their smaller size and greater flexibility?



Q – What additional confidence does US Government support for SMRs give you in terms of improving their future deployment potential?



Recommendations

- Continue monitoring and exploring Wall Street attitudes
- Consider tailored outreach/relationship building with Wall Street
- Specifically examine the attraction of Natural Gas and Roof Top Solar and apply to SMR strategy
- Build on Vogtle and Summer experience

Thank You

Discussion

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