

One Year After Fukushima American Attitudes About Nuclear Power

March 2012



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Methodology

In 2011, ORC International's CARAVAN was commissioned by the Civil Society Institute to conduct a survey of American's attitudes and opinions about Nuclear Power. The 2011 survey was conducted March 15-16, 2011, four days after the Japanese nuclear reactor crisis caused by the earthquake and tsunami. In that survey, 814 adult Americans were interviewed by landline telephone.

This report presents the findings of an update of the 2011 survey questions. The 2012 survey was conducted among a sample of 1,032 adults comprising 518 men and 514 women, 21 years of age and older. The survey results have been weighted by age, gender, education, race and region to demographically reflect the population. The survey was conducted on February 23-26, 2012. In the 2012 survey, 782 of the interviews were conducted by landline and 250 were completed on a cell phone. The margin of error for the 2012 survey is plus or minus three percentage points at the 95% confidence level.

With the one year anniversary of the Japanese reactor disaster nearing on March 11, 2012, a new ORC International survey of 1,032 Americans conducted February 23-26, 2012 for the nonprofit and nonpartisan Civil Society Institute shows that the events in Fukushima continue to have a major impact on U.S. views about further expanding the use of nuclear power in this nation. The 2012 findings are benchmarked to a March 2011 conducted by ORC International for CSI:

- Nearly six in 10 Americans (57 percent) are less supportive of expanding nuclear power in the United States than they were before the Japanese reactor crisis, a nearly identical finding to the 58 percent who responded the same way when asked the same question one year ago. Those who say they are more supportive of nuclear power a year after Fukushima account for well under a third (28 percent) of all Americans, little changed from the 24 percent who shared that view in 2011.
- More than three out of four Americans (77 percent) say they are now more supportive than they were a year ago "to using clean renewable energy resources such as wind and solar and increased energy efficiency as an alternative to more nuclear power in the United States." In fact, about half (49 percent) of ALL Americans now say they are now "much more supportive" of relying on more clean energy and energy efficiency than they were a year ago. Both of these findings edged up from the 2011 survey levels of 76 percent and 46 percent, respectively.

- More than three out of four Americans (77 percent) would support "a shift of federal loan-guarantee support for energy away from nuclear reactors" in favor of wind and solar power. This level of support was up from the 74 percent finding in the 2011 survey.
- 72 percent of Americans do not "think taxpayers should take on the risk for the
 construction of new nuclear power reactors in the United States through billions
 of dollars in new federal loan guarantees for new reactors." This level of
 opposition was nearly identical to the 73 percent opposition level reported in the
 March 2011 survey.
- In response to a new question in the 2012 survey, more than six in 10 Americans (61 percent) said they were less supportive of nuclear power as a result of "reports in the U.S. during 2011 and so far in 2012 of nuclear reactors that had to be shut down due to hurricanes, tornadoes, flooding, leaks or other emissions of radioactive materials, and/or equipment failure." Fewer than three in 10 Americans (29 percent) say that such reports have made them more supportive of nuclear power.

- Nearly four out of five Americans (78 percent) would favor Congress reviewing a 1957 law indemnifying nuclear power companies from most disaster clean-up costs. Instead, Americans would hold the companies "liable for all damages resulting from a nuclear meltdown or other accident." This figure is up 5 percentage points from the 73 percent support level seen in 2011.
- About two thirds (65 percent) of Americans now say they would oppose "the
 construction of a new nuclear reactor within 50 miles of [their] home." This figure
 was roughly the same as the 67 percent opposition level in the March 2011
 survey.
- Over half (52 percent) of Americans living within 50 miles of a nuclear reactor do NOT know "what to do in the event of nuclear reactor emergency," such as "the evacuation route and what other steps to take." (That figure is unchanged from the 2011 survey findings.) The 2012 poll indicates that nearly one in five (18 percent) of Americans say they live within 50 miles of a nuclear power reactor.

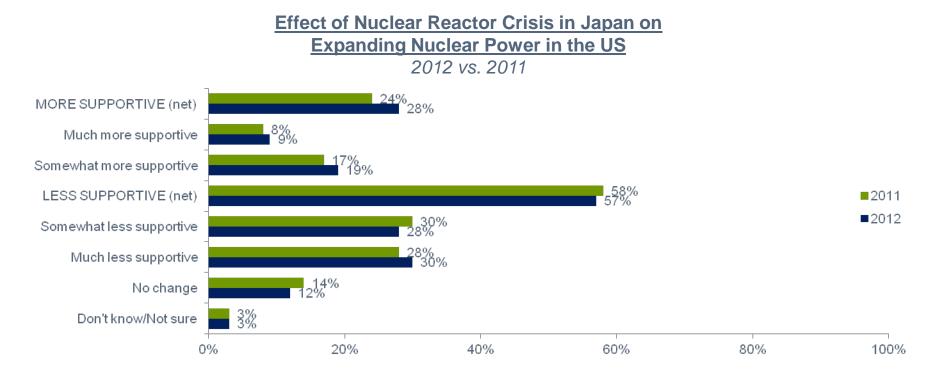
- Fewer than half of Americans (46 percent) now support more nuclear reactors in the U.S. This level of support is unchanged from the period immediately after Fukushima. By contrast, opponents of more nuclear reactors in the U.S. rose 5 percentage points in the last year to 49 percent (up from 44 percent in 2011). The number of "fence sitters" on the question of nuclear power fell from 10 percent to 5 percent, with the shift among the undecided coming down against more nuclear power.
- Over half of Americans (51 percent) would now support "a moratorium on new nuclear reactor construction in the United States," if "increased energy efficiency and off the shelf renewable technologies such as wind and solar could meet our energy demands for the near term." This support level was little changed from the 53 percent level seen in the March 2011 survey.

Detailed Findings

Effect of Nuclear Reactor Crisis in Japan on Expanding Nuclear Power in the US

As a result of the nuclear reactor crisis in Japan, a majority of Americans (57%) are less supportive of expanding nuclear power in the US. This opposition is unchanged from the findings of the survey last year.

• Groups who are less supportive of expanding nuclear power as a result of the crisis in Japan include women (63%), those age 18-34 (65%), respondents in the Northeast (63%), households with incomes of less than \$35,000 (65%), those with less than a high school education (60%), Democrats (66%) and Independents (61%).

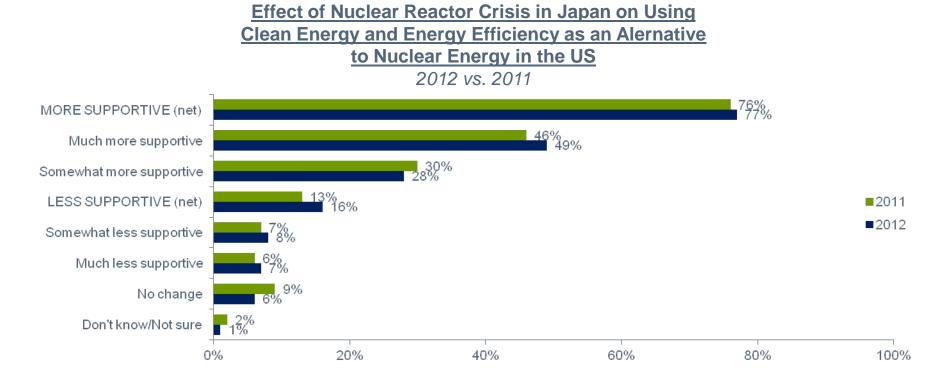


A2: Thinking about the nuclear reactor crisis a year ago in Japan, are you now more or less supportive of expanding nuclear power in the United States than you were before that crisis? Would you say you are ...? Total respondents 2012 = 1,032, 2011 = 814.

Effect of Nuclear Reactor Crisis in Japan on Using Clean Energy and Energy Efficiency in the US

As a result of the nuclear reactor crisis in Japan, a majority of Americans (77%) are more supportive of using clean energy and energy efficiency as an alternative to more nuclear power in the U.S. This support is unchanged from the findings of the survey the last year.

• Groups who are even more supportive of using clean energy and energy efficiency as an alternative to more nuclear power in the US are: those age 18-44 (82%), households with \$100,000 or more in income (82%), those with less than a college education (82%) and Democrats (84%).



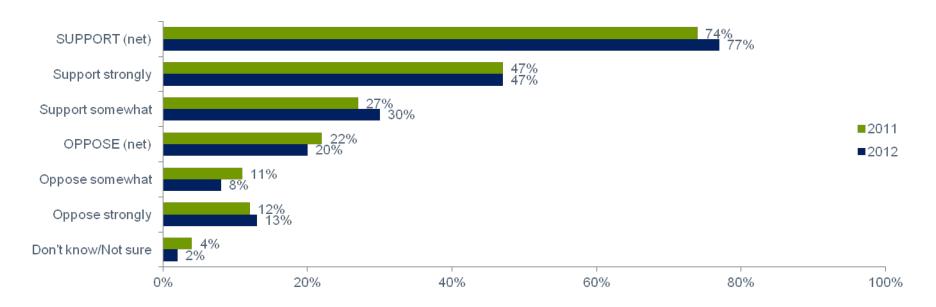
A3: Again, thinking about the nuclear reactor crisis in Japan, would you say that you are now more or less supportive than you were before the crisis of using clean renewable energy resources – such as wind and solar – and increased energy efficiency as an alternative to more nuclear power in the United States? Are you... Total respondents 2012 = 1,032, 2011 = 814.

Favor or Oppose Shifting Federal Loan Guarantees from Nuclear Energy to Clean Renewables

A majority of respondents (77%) would support shifting the federal loan guarantees currently given to nuclear reactors to renewable forms of energy like wind or solar. This is a slight increase of three percentage points from the 2011 survey.

• Groups who are even more supportive of this shift of federal funds include women (83%), those 18-44 (83%), those in the Northeast (83%), and Democrats (87%).

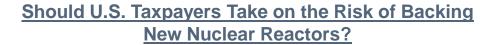
Favor or Oppose Shifting Federal Loan Guarantees from Nuclear Energy to Clean Renewables 2012 vs. 2011

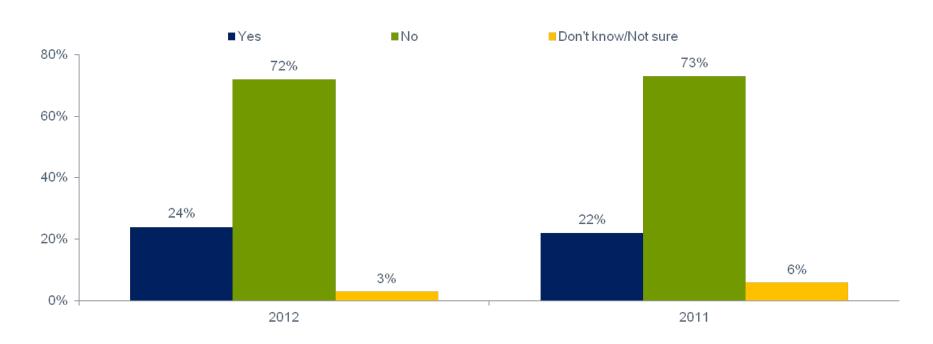


A6: Here is another question about federal support for energy development. Would you support or oppose a shift of federal loan-guarantee support for energy away from nuclear reactors towards clean renewable energy such as wind and solar? Would you... Total respondents 2012 = 1,032, 2011 = 814.

Should US Taxpayers Take on the Risk of Backing New Nuclear Reactors?

Nearly three-fourths of respondents do not believe that U.S. taxpayers should take on the risk of backing the construction of new nuclear reactors through federal loan guarantees.





A5. Do you think taxpayers should take on the risk for the construction of new nuclear power reactors in the United States through billions of dollars in new federal loan guarantees for new reactors?

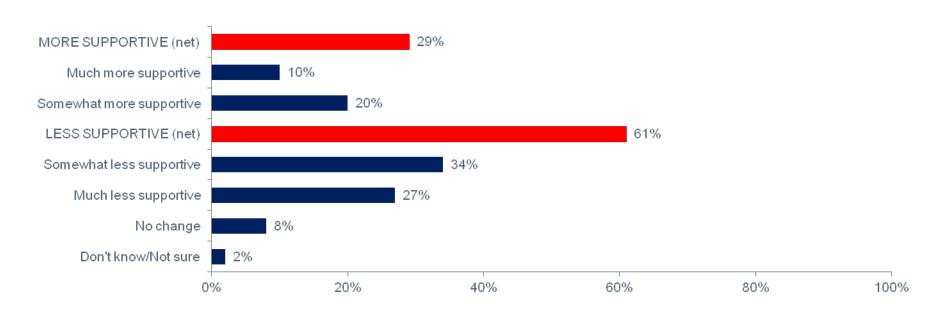
Total respondents 2012 = 1,032, 2011 = 814.

Effect of Nuclear Shut Downs, Leaks or Equipment Failures on Support for Nuclear Energy

The effect of reports in the US in 2011 and 2012 of nuclear reactors that have been shut down due to weather issues, leaks or equipment failure, has caused a majority of Americans (61%) to be less supportive of nuclear power as a source of energy.

• Groups who are even less supportive of nuclear energy because of these issues are: women (67%), those with household incomes of less than \$35,000 (71%), those who are not college graduates (64%), Democrats (67%) and Independents (61%).

Effect of Nuclear Reactor Shut Downs, Leaks or Equipment Failures on Support for Nuclear Power



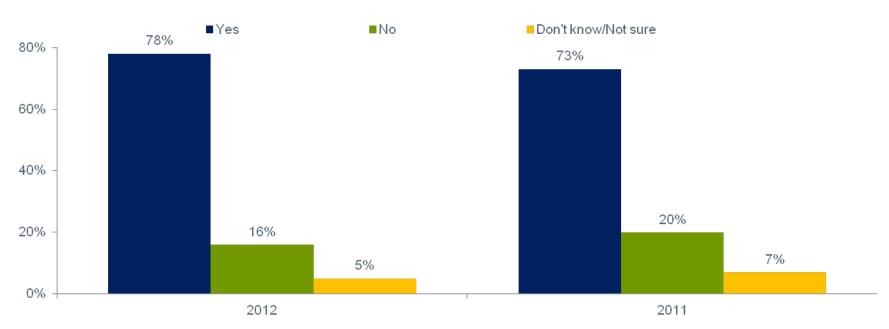
A4: Do the reports in the U.S. during 2011 and so far in 2012 of nuclear reactors that had to be shut down due to hurricanes, tornadoes, flooding, leaks and other emissions of radioactive materials, and/or equipment failure, make you feel more or less supportive of nuclear power? Would you say you are...? Total respondents 2012 = 1,032.

Should Nuclear Reactors be Liable for Meltdown Damages or Other Accidents?

More than three-fourths of respondents (78%) think nuclear reactors should be liable for meltdown damages or damages from other similar accidents. This is an increase of five percentage points from the 2011 survey.

• Those who are even more supportive of holding reactors liable include: households with less than \$50,000 in income (83%), and those with less than a college education (83%).

Should Nuclear Reactors be Held Liable for Damages from Meltdowns or Other Accidents?



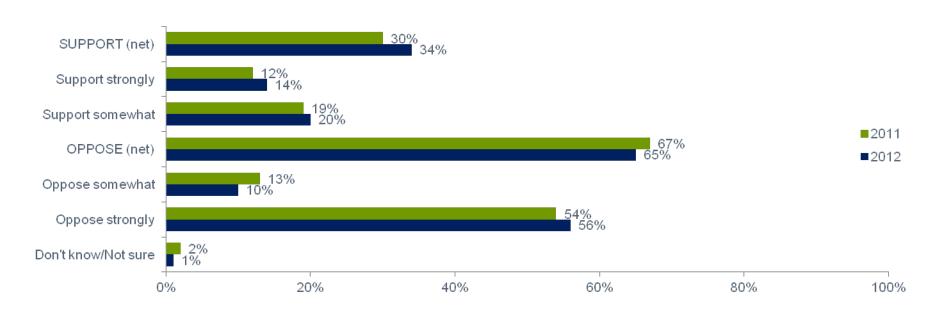
A7. Currently nuclear reactors facilities in the U.S. are indemnified under the Price Anderson Act. In the event of an accident, or a meltdown, the corporate owners and operators of a nuclear reactor would have limited liability for damages. The 1957 act was seen as necessary for getting private industry to build nuclear reactors and it has been renewed for new reactors built before 2025. Should Congress review the act and hold these corporations liable for all damages resulting from a nuclear meltdown or other accident? Total respondents 2012 = 1,032, 2011 = 814.

Support/Oppose Building a Nuclear Reactor Within 50 Miles of Your Home

Only a third (34%) would support the construction of a new nuclear reactor within 50 miles of their home. This is up slightly from the 30% who would support such an action a year ago.

• Support is higher among men (43%), those age 65 and over (41%), those in households with incomes of \$75,000 or more (46%), those with a college education (44%) and Republicans (49%).

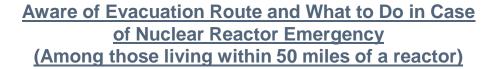
Support/Oppose Building a Nuclear Reactor Within 50 Miles of Your Home 2012 vs. 2011

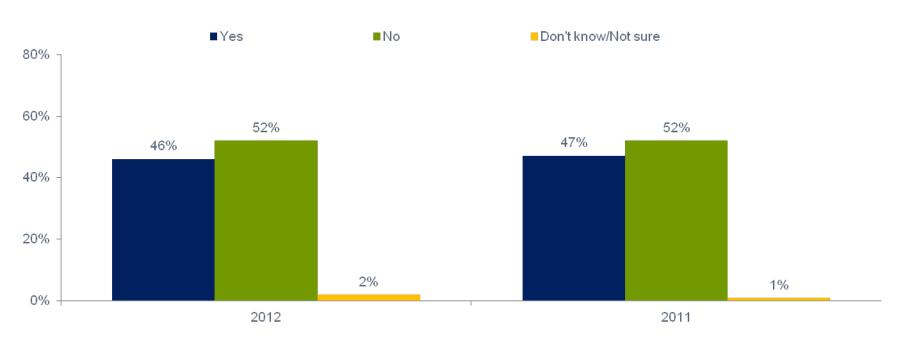


A10: Would you support or oppose the construction of a new nuclear reactor within 50 miles of your home? Would you ... Total respondents 2012 = 1,032, 2011 = 814.

Aware of Evacuation Route in Case of Nuclear Emergency?

Less than half of those who live within 50 miles of a nuclear reactor, say they are aware of what to do or what the evacuation route is in the case of a nuclear reactor emergency. This is unchanged from the survey conducted a year ago.



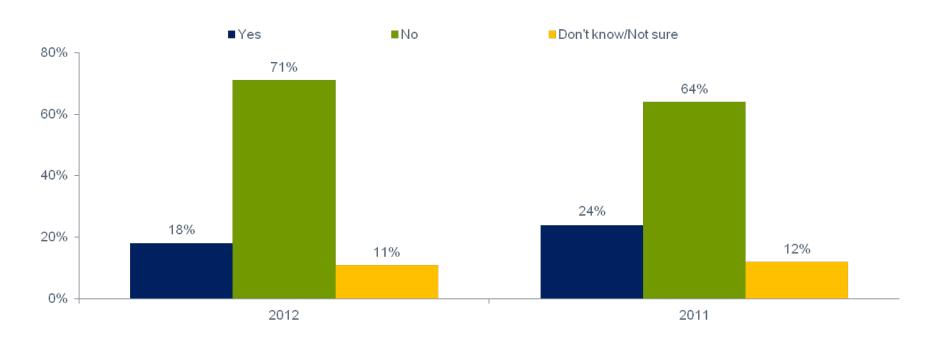


A12. How aware are you of what to do in the event of a nuclear reactor emergency – do you know the evacuation route and what other steps to take? Base = those who live with in 50 miles of a reactor. In 2012 n = 227, in 2011, n = 224.

Living Within 50 Miles of a Nuclear Reactor Site

Less than one in five (18%) say they live within 50 miles of a nuclear reactor site. This is down from the nearly one-fourth (24%) who said they did in the survey a year ago.

Living Within 50 Miles of a Nuclear Reactor Site



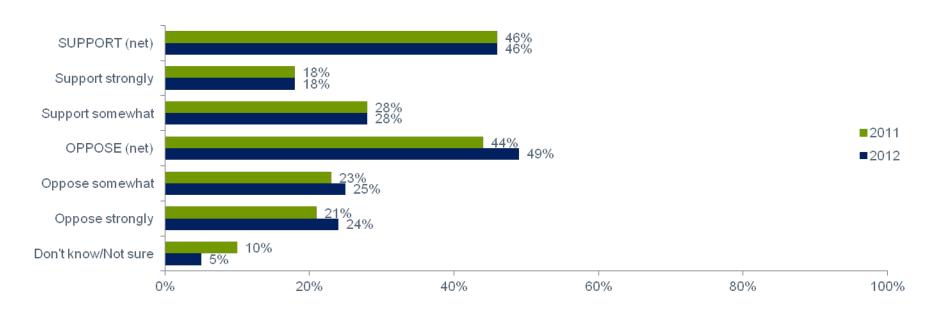
A11. Do you currently live within 50 miles of a nuclear reactor site? Total respondents 2012 = 1,032, 2011 = 814.

Support/Oppose Nuclear Power Reactors in the US

Support for nuclear reactors in the U.S. is unchanged from a year ago, while opposition has increased five percentage points to 49%.

• Opposition is higher among women (56%), those age 18-34 (58%), respondents in the Northeast (60%), households with incomes of less than \$35,000 (58%), those who are not college graduates (54%), Democrats (56%) and Independents (55%).

Support/Oppose Nuclear Power Reactors in the US 2012 vs. 2011



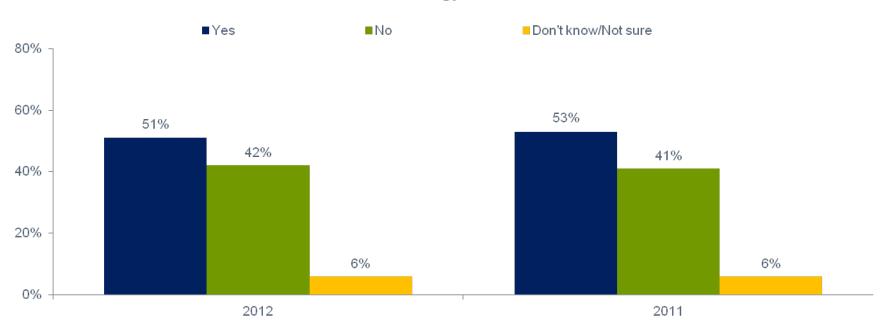
A1: Would you say that you support or oppose nuclear power reactors in the United States? Would you say you ... Total respondents 2012 = 1,032, 2011 = 814.

Support for A Nuclear Moratorium if Renewables Could Meet Energy Demands?

Half (51%) support a moratorium on building new nuclear reactors if renewable energy solutions like wind and solar could meet our energy needs for the near term. This support is unchanged from last year's survey.

• Those who are even more supportive of the moratorium include: those aged 18-34 (55%), households with \$100,000 or in income (63%), Democrats (58%) and Independents (53%).

Support for a Nuclear Moratorium is Renewables Could Meet Energy Demands?



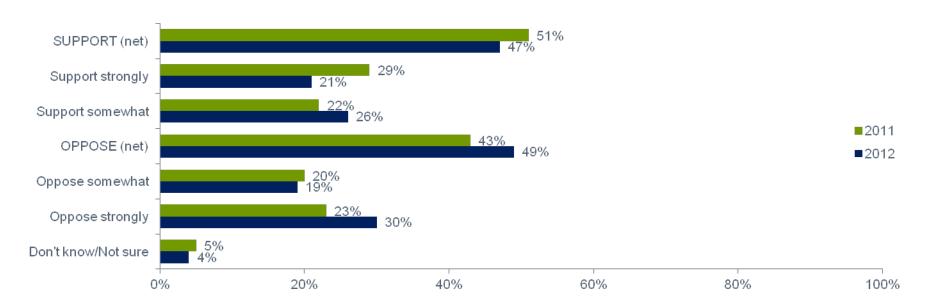
A8. If increased energy efficiency and off the shelf renewable technologies such as wind and solar could meet our energy demands for the near term, would you support a moratorium on new nuclear reactor construction in the United States? Total respondents 2012 = 1,032, 2011 = 814.

Support/Oppose Extending the Lifespan of our Oldest Nuclear Power Reactors

Half (51%) support halting the extension of the lifespan of the oldest nuclear reactors in the U.S. This is a decrease of four percentage points from the 2011 survey.

• Support is higher among households with incomes of more than \$75,000 (55%), and among Democrats (51%).

Support/Oppose Halting the Extension of the Lifespan of the Oldest Nuclear Power Reactors in the U.S. 2012 vs. 2011



A9: One of the concerns about the Japanese reactors was that they were of an old design and had been constructed in the 1970s. Here in the U.S., nearly one out of five nuclear reactors is of the same design and about the same age as those in Japan. Currently, the Federal government is extending the permitted lifespan of those and other aging reactors. Would you support or oppose a halt to the United States extending the operating lifespan of its oldest nuclear reactors? Would you ... Total respondents 2012 = 1,032, 2011 = 814.

First of all ...

A1 Would you say that you support or oppose more nuclear power reactors in the United States? Would you say you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- 01 Support strongly 18%
- 02 Support somewhat **28%**
- Oppose somewhat 25%
- Oppose strongly 24%
- 99 DON'T KNOW/NOT SURE 5%

Support (Net) = 46%Oppose (Net) = 49%

A2 Thinking about the nuclear reactor crisis a year ago in Japan ... are you now more or less supportive of expanding nuclear power in the United States than you were before that crisis? Would you say you are...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- Much more supportive of more nuclear power 9%
- O2 Somewhat more supportive of more nuclear power 19%
- O3 Somewhat less supportive of more nuclear power 28%
- Much less supportive of more nuclear power 30%
- 98 NO CHANGE 12%
- 99 DON'T KNOW/NOT SURE 3%

More supportive (Net) = 28%Less supportive (Net) = 57% Α

A3 Again, thinking about the nuclear reactor crisis in Japan ... would you say that you are now more or less supportive than you were before the crisis to using clean renewable energy resources – such as wind and solar – and increased energy efficiency as an alternative to more nuclear power in the United States? Are you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- Much more supportive of renewable energy 49%
- O2 Somewhat more supportive of renewable energy 28%
- O3 Somewhat less supportive of renewable energy 8%
- Much less supportive of renewable energy 7%
- 98 NO CHANGE **6%**
- 99 DON'T KNOW/NOT SURE 1%

More supportive (Net) = 77% Less supportive (Net) = 16%

A4 Do the reports in the U.S. during 2011 and so far in 2012 of nuclear reactors that had to be shut down due to hurricanes, tornadoes, flooding, leaks or other emissions of radioactive materials, and/or equipment failure make you feel more or less supportive of nuclear power? Would you say you are...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- 01 Much more supportive of nuclear power 10%
- O2 Somewhat more supportive of nuclear power 20%
- O3 Somewhat less supportive of nuclear power 34%
- Much less supportive of nuclear power 27%
- 98 NO CHANGE **8%**
- 99 DON'T KNOW/NOT SURE 2%

More supportive (Net) = 29%Less supportive (Net) = 61%

A5 Do you think taxpayers should take on the risk for the construction of new nuclear power reactors in the United States through billions of dollars in new federal loan guarantees for new reactors?

(Base = 1032)

- 01 YES **24%**
- 02 NO **72%**
- 99 DON'T KNOW/NOT SURE 3%

A

A6 Here is another question about federal support for energy development ... would you support or oppose a shift of federal loan-guarantee support for energy away from nuclear reactors and towards clean renewable energy such as wind and solar? Would you... (READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- 01 Support strongly 47%
- O2 Support somewhat 30%
- Oppose somewhat 8%
- Oppose strongly 13%
- 99 DON'T KNOW/NOT SURE 2%

Support (Net) = 77%Oppose (Net) = 20%

A7 Currently nuclear reactor facilities in the U.S. are indemnified under the Price Anderson Act. In the event of an accident or a meltdown, the corporate owners and operators of a nuclear reactor would have limited liability for damages. The 1957 Act was seen as necessary for getting private industry to build nuclear reactors and it has been renewed for new reactors built before 2025.

Should Congress review the Act and hold these corporations liable for all damages resulting from a nuclear meltdown or other accident?

(Base = 1032)

- 01 YES **78%**
- 02 NO **16%**
- 99 DON'T KNOW/NOT SURE 5%
- A8 If increased energy efficiency and off the shelf renewable technologies such as wind and solar could meet our energy demands for the near term, would you support a moratorium on new nuclear reactor construction in the United States?

(Base = 1032)

- 01 YES **51%**
- 02 NO **42%**
- 99 DON'T KNOW/NOT SURE 6%

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A

A9 One of the concerns about the Japanese reactors was that they were of an old design and had been constructed in the 1970s. Here in the U.S., nearly one out of five nuclear reactors is of the same design and about the same age as those in Japan. Currently, the federal government is extending the permitted lifespan of these and other aging reactors.

Would you support or oppose a halt to the United States extending the operating lifespan of its oldest nuclear reactors? Would you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- 01 Support strongly 21%
- O2 Support somewhat 26%
- Oppose somewhat 19%
- Oppose strongly 30%
- 99 DON'T KNOW/NOT SURE 4%

Support (Net) = 47%Oppose (Net) = 49%

A10 Would you support or oppose the construction of a new nuclear reactor within 50 miles of your home? Would you...

(READ ENTIRE LIST BEFORE RECORDING ONE ANSWER)

(Base = 1032)

- 01 Support strongly 14%
- O2 Support somewhat 20%
- Oppose somewhat 10%
- Oppose strongly **56%**
- 99 DON'T KNOW/NOT SURE 1%

Support (Net) = 34%Oppose (Net) = 65%

A11 Do you currently live within 50 miles of a nuclear reactor site?

(Base = 1032)

- 01 YES **18%**
- 02 NO **71%**
- 99 DON'T KNOW/NOT SURE 11%

5

[ASK IF A11 (01)]

A12 How aware would you say you are of what to do in the event of a nuclear reactor emergency -- do you know the evacuation route and what other steps to take?

(Base = 227)

- 01 YES **46%**
- 02 NO **52%**
- 99 DON'T KNOW/NOT SURE 2%