

 **REAL {GLOBAL} ESTATE** wsj.com/realestate
THE WALL STREET
live

Dow Jones Reprints: This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers, use the Order Reprints tool at the bottom of any article or visit www.djreprints.com

[See a sample reprint in PDF format.](#)

[Order a reprint of this article now](#)

THE WALL STREET JOURNAL

WSJ.com

WORLD NEWS | MARCH 14, 2011

U.S. Could Rethink Nuclear Reliance

Industry Ponders Political Fallout in America Following the Problems in Japan

By **STEPHANIE SIMON**



Associated Press

Residents who were evacuated from areas surrounding the Fukushima nuclear facilities damaged in Friday's massive earthquake are checked for radiation contamination in Koriyama city, Fukushima prefecture, Sunday.

The U.S. nuclear power industry believed it was poised for a renaissance.

President Obama's 2012 budget proposed \$36 billion in loan guarantees to build nuclear power plants. He called, too, for spending hundreds of millions on nuclear energy research and modern reactor design. Powerful Republicans were on board, calling for expansion of nuclear power a rare opportunity for bipartisan cooperation.



[View Full Image](#)

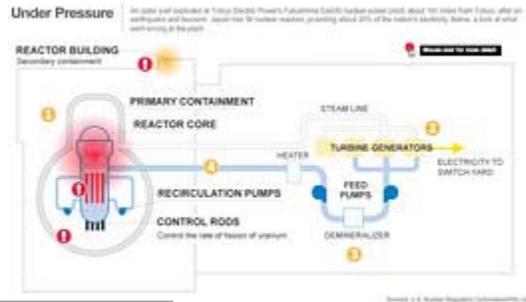
Associated Press

Patients who might have had radiation exposure are carried into a treatment compound in Nihonmatsu city.

Then an explosion at an earthquake-damaged nuclear plant in northern Japan on Saturday tore apart a building housing a reactor containment structure. Smoke billowed from the plant. Japanese officials ordered an evacuation of tens of thousands of people. Later, officials said cooling systems were failing at a second reactor at the same plant, putting it at risk of meltdown.

Industry experts and analysts at once began to ponder the political fallout in the United States.

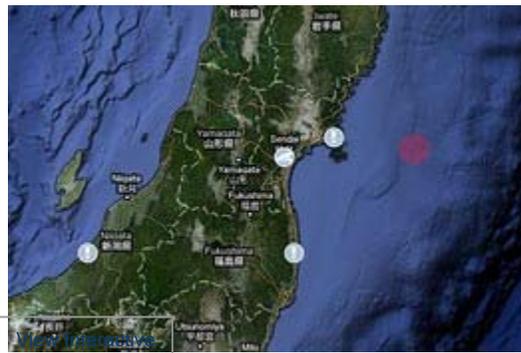
Power Plant Under Pressure



[View Interactive](#)

See what went wrong at the nuclear plant.

Japan Quake's Effects



See a map of post-earthquake events in Japan, Hawaii and the U.S. West Coast.

Shaky Ground



Colliding plates under earth's surface make Asia Pacific one of the most tectonically active region on earth.

Disastrous Japan Earthquakes



Associated Press

See a historical gallery of past earthquakes in Japan.

The World's Biggest Earthquakes



Associated Press

A photographer looked over wreckage as smoke rose in the background from burning oil storage tanks at Valdez, Alaska, March 29, 1964.

The 1979 nuclear accident at Three Mile Island in Pennsylvania froze the nuclear power industry in the U.S. No new licenses were granted for 30 years. The Three Mile incident -- sparked by the failure of a cooling system -- did not cause any deaths, but many Americans were terrified by the plant's move to vent radioactive steam into the air and by ominous talk of a potential meltdown.

The 1986 nuclear accident at Chernobyl only reinforced American skepticism of nuclear power.

But in recent years, the industry has steadily chipped away at that wariness. Industry executives and their political allies promote nuclear power as "clean energy," because, unlike coal or natural gas, it does not produce the greenhouse gases linked to global warming.

The Nuclear Regulatory Commission is now reviewing 20 more license applications from a dozen companies seeking to produce nuclear power. Site preparations for new reactors have begun in Georgia and South Carolina, and plans are underway to finish a reactor that was started years ago but never completed in Tennessee. That reactor should come online in 2013 and those in South Carolina and Georgia are expected to begin operations in 2016. All told, the industry expects up to eight new reactors to be churning out power by 2020, according to Mitch Singer, a spokesman for the Nuclear Energy Institute, an industry trade group.

The U.S. currently has 104 nuclear plants in 31 states. Together, they produce 20% of the nation's electricity.

Mr. Singer said he doesn't think the accident in Japan will derail the U.S. nuclear boom. In fact, he said the explosion should reassure Americans

that their own plants will be prepared for any emergency, because the industry will disseminate lessons learned in Japan around the globe, helping other reactors shore up their defenses against even devastating natural disasters, like the quake and the tsunami that followed.

"At this point," Mr. Singer said, "I don't think we're going to see a major impact on the U.S. nuclear industry."

But Peter Bradford, a former member of the Nuclear Regulatory Commission, predicted Americans would respond to the Japanese disaster with "greatly heightened skepticism and heightened unwillingness to have nuclear power plants located in one's own neighborhood."

He predicted as well greater regulatory scrutiny of existing nuclear plants that are seeking to extend their operating licenses, especially when those plants are located in seismically active zones, such as Southern California's San Onofre Nuclear Generation Station and Diablo Canyon Power Plant.

"The image of a nuclear power plant blowing up before your eyes on the television screen is a first," Mr. Bradford said. "That cannot be good for an industry that's looking for votes in Congress and in the state legislatures."

Mr. Obama's proposal to expand loan guarantees to aid construction of new reactors might also take a hit, especially given the push in Congress to cut spending, said Robert Alvarez, a former senior policy advisor for the U.S. Department of Energy who now works on nuclear disarmament issues. "There might be a political tsunami," Mr. Alvarez said.

Within hours of the blast at the Japanese nuclear plant, Rep. Edward J. Markey, the top Democrat on the House Natural Resources Committee, called on the Obama administration to impose a moratorium on building new reactors in seismically active areas and to require those already in earthquake-prone zones to be retrofitted with stronger containment systems. He also called for a thorough investigation of whether design flaws contributed to the Japanese accident. Twenty three reactors in the U.S. use the same design parameters as Japan's crippled Fukushima Daiichi plant.

"The unfolding disaster in Japan must produce a seismic shift in how we address nuclear safety here in America," Rep. Markey said.

Rep. Joe Barton, a Republican from Texas who has long supported nuclear power, said he hoped the damage to the reactor in Japan didn't turn the American public off nuclear energy. But he added that "even proponents of nuclear power want to get to the bottom" of the Japanese accident and figure out what went wrong – and how to fix it.

"I believe very strongly in the future of nuclear power," Mr. Burton said, "but those who support it have to insist that the safety redundancy features perform" even during a catastrophic natural disaster.

Even before the explosion in Japan, economic reality had taken a bite out of the nuclear industry's ambitious expansion plans in the U.S.

Natural gas has been so cheap that utilities have turned to it to generate electricity, rather than contemplate building multi-billion-dollar reactors. The recession has also dampened demand for electrical power, further diminishing the appeal of a massive investment in nuclear facilities.

[Constellation Energy Corp.](#) recently backed out of plans to build a new reactor at an existing nuclear plant in Calvert Cliffs, Md., because of high expense and low demand. The Department of Energy has approved just one project, in Georgia, for its loan guarantees.

Nuclear power continues to expand abroad however, with dozens of new power plants planned in China, India and Europe. And even skeptics of nuclear power in the U.S. said it's too early to tell how the Japanese reactor explosion will affect the industry's long-term future. If radiation leaks turn out to be minimal and emergency response plans are proved effective, the American public might take it as a good sign, said Mr. Singer, the industry spokesman. "It would go a long way to reassuring people that we can handle some of these challenging situations," he said.

Quake Hits Japan

[Rescuers Dig for Survivors, But Thousands Feared Dead](#)

[Officials Struggle to Prevent Meltdown at Two Reactors](#)

[Reactor Failures Spark Questions on Safety Systems](#)

[Damaged Nuclear-Power Plants Could Spew Range of Emissions](#)

[Doubts Form in Shadow of Nuclear Plants](#)

[Quake to Test Japan's Economy, Markets](#)

[Asia Closely Watches Japan's Nuclear Woes](#)

[Factories Close As Power Is Cut](#)

Past Nuclear Events

1 Chernobyl

Date: April 26, 1986

Location: Soviet Union (now Ukraine)

INES: 7

Event: During a test, a sudden surge of power destroyed a reactor, releasing massive amounts of radioactive material. Boron and sand were poured on the reactor from the air in an attempt to stop a fire and limit damage. The unit was also entombed in a temporary concrete "sarcophagus" to limit further release of radioactive material.

Effects: Of the approximately 600 workers present at the time of the accident, two died within hours of the reactor explosion and 134 received high radiation doses and suffered from acute radiation sickness. Of these, 28 workers died in the first four months after the accident. Ukraine, Belarus, and Russia were most affected by the disaster in the long term.



Zufarow/Agence France-
Presse/Getty Images



—Naureen Malik contributed to this article

Write to Stephanie Simon at stephanie.simon@wsj.com

Copyright 2011 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. Distribution and use of this material are governed by our [Subscriber Agreement](#) and by copyright law. For non-personal use or to order multiple copies, please contact Dow Jones Reprints at 1-800-843-0008 or visit www.djreprints.com