

# **NEWS RELEASE**

For immediate release: Thursday, March 17, 2011 For more information:

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### Statement from NYPIRG Regarding the Nuclear Disaster in Japan March 17<sup>th</sup>, 2011

The events in Japan have revealed with heart-stopping clarity just how badly things can go wrong when nuclear power gets out of control.

The twin disasters of a massive earthquake and tsunami in Japan have caused damage to their nuclear reactors at an unprecedented scale. Never before in history has there been a threat of multiple meltdowns occurring simultaneously. Our sympathy goes out to the people of Japan, who are now dealing with a nuclear emergency on top of these devastating natural disasters.

## Safety and Environmental Concerns about Nuclear Reactors in the U.S.

The aging fleet of commercial nuclear reactors in the United States includes many of the same design as those experiencing problems in Japan. Most of the U.S. reactors are in coastal areas and many are in earthquake zones. The direct cause of the meltdowns in Japan was not the earthquake or the tsunami, but the loss of offsite power to cool the reactors and the failure of onsite back-up power systems, something which could happen under numerous emergency scenarios. While the Nuclear Regulatory Commission asserts that reactors in the U.S. are designed to withstand earthquakes, tornadoes, flooding, hurricanes, ice storms, and acts of terrorism, we can take little comfort in these assurances as we observe the horrifying scenario unfolding in Japan.

For years, the nuclear industry in America has pointed to Japan as an example of how safe nuclear power is. Now they have been proven wrong. Nobody would have wished this terrible accident to occur. But we have an obligation, to both the victims of this tragedy and to the American public, to take important lessons away from it. Advocates of nuclear power can't wish away its potential hazards in the event of a catastrophe. Furthermore, there is still no safe storage solution for high level radioactive waste, which means "spent" fuel rods – which are far more radioactive than fresh fuel – must be stored on site at nuclear reactors. As we have seen, this has compounded the problem at Fukushima.

### Nuclear Power is Not a Solution to Climate Change

The nuclear industry has attempted to stage a comeback in the United States, seeking to position nuclear power as a solution to climate change. In reality, we do not need nuclear power to achieve the greenhouse gas emissions reductions that scientists say are necessary to prevent catastrophic climate change. Researchers from California have shown that we can meet the country's new energy needs with wind, water and solar power by 2030, and replace existing dirty energy sources by 2050.<sup>1</sup> Synapse Energy Economics has shown that the U.S. can achieve 80% emissions reductions in the electric power sector by 2050 by increased reliance on energy efficiency and expanded renewable energy, without the high risks associated with coal and nuclear energy.<sup>2</sup> The Synapse model does not rely on new nuclear power and retires all the nuclear plants in the Northeast.

### **Nuclear Power is Not Economical**

The cost of building and operating nuclear reactors is so high that neither Wall Street investors nor the insurance industry wants to take on such a risky investment. The nuclear industry cannot survive without heavy taxpayer subsidies, in the form of federal loan guarantees and liability caps. If a serious accident were to occur in the U.S., the federal government would be responsible for all but the first \$12.6 billion in damages.<sup>3</sup> President Obama has proposed \$36 billion in federal loan guarantees to help spur construction of new nuclear power plants. In the likely event of a loan default, both taxpayers and ratepayers would foot the bill. Even before the accident in Japan, economists questioned the wisdom of this investment.<sup>4</sup>

With the uncertainty, delays, and costs associated with constructing new nuclear power plants, there are far better investments we can make to achieve immediate and long-term reductions in greenhouse gas emissions, using technology that is readily available today. Investments in energy efficiency and renewable energy, as well as in other sectors such as transportation, also have tremendous potential to put Americans back to work in new, "green-collar" jobs.

#### Nuclear Power in New York – What Should be Done?

There is an immediate need to address these issues here in New York, where there are four commercial nuclear power plants operating, and a major new plant proposed:

- The Indian Point nuclear reactors in Westchester County, just 24 miles north of New York City, are located on two active geological fault lines. Over 20 million people live within the 50-mile peak injury zone. Of the 104 nuclear power plants in the U.S., Indian Point has the highest risk of earthquake damage, according to an NRC report.<sup>5</sup> While the NRC estimates that the risk of core damage from an earthquake at Indian Point is 1 in 10,000, the risks could be substantially higher. The NRC has refused to consider new findings by the Lamont-Doherty Earth Observatory that there is a second major fault line within a mile of Indian Point. According to Lamont-Doherty's seismological experts, a magnitude 6 or 7 earthquake in the vicinity of Indian Point is quite possible.<sup>6</sup> Both of these plants have been plagued with mechanical problems and the evacuation plan is unrealistic. The Nuclear Regulatory Commission is currently considering renewing the operating licenses of Indian Point 2 and 3, which expire in 2013 and 2015, respectively. **The Indian Point nuclear power plants should be shut down permanently.**
- Two nuclear reactors in Oswego County (the FitzPatrick plant and Nine Mile Point 1) use the same technology as the reactors at the Fukushima Daiichi plant in Japan. These reactors date back to the 1960s and early 70s.<sup>7</sup> Despite longstanding concerns about the safety risks of Mark I boiling water reactors,<sup>8</sup> the Nuclear Regulatory Commission (NRC) has extended their operating licenses for another 30 years. In addition, over 3,370 metric tons of highly

radioactive "spent" nuclear fuel are stored on-site at New York's commercial reactors in densely-packed pools, posing a major safety risk that has never been fully examined.<sup>9</sup> In the wake of the Japanese disaster, Germany temporarily shut down all of its nuclear plants that began operating before 1980 in order to perform a safety review.<sup>10</sup> Five of New York's six operating reactors began operating before 1980. Governor Cuomo should call for a complete safety review of all of New York's commercial nuclear reactors, not just those at Indian Point.

Unistar has submitted an application to build a 1,600 MW nuclear reactor in Oswego, on the same site as three other operating reactors. <u>If constructed, this plant would be the largest in North America</u>. UniStar claims that the new European Pressurized Water Reactor (EPR) design is safer than older models. However, the so-called "new generation" reactor has never actually been proven to work. The prototype EPR model is still being built in Finland, where it has been fraught with construction problems, and several European countries have raised serious safety concerns.<sup>11</sup> Based on these problems, the UniStar proposal, which is temporarily on hold, may fail for economic reasons alone. Under Governor Paterson, the state embraced the concept of new nuclear power, both in the state's energy planning and climate action planning processes.<sup>12</sup> Governor Cuomo should reverse this position and call for a moratorium on new nuclear power plants in New York. New York's Congressional delegation should oppose federal loan guarantees for new nuclear power plants.

We must recommit to advancing safe and clean energy solutions in New York. Nuclear power is dangerous, expensive, and unreliable. New York should take this opportunity to lead the country in a safer and more sustainable direction.

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<sup>2</sup> Synapse Energy Economics, "Beyond Business as Usual: Investigating a Future without Coal and Nuclear Power in the United States," May 5, 2010, www.synapse-energy.com.

<sup>3</sup> Price-Anderson Nuclear Industries Indemnity Act of 2005.

<sup>4</sup> Mark Cooper, "Why New Nuclear Reactor Loan Guarantees are Now More Imprudent than Ever," Feb. 12, 2011, http://yubanet.com/opinions/Mark-Cooper-Why-Nuclear-Reactor-Loan-Guarantees-Are-Now-More-Imprudent-Than-Ever.php.

<sup>5</sup> Nuclear Regulatory Commission, "Safety/Risk Assessment Results For Generic Issue 199, "Implications Of Updated Probabilistic Seismic Hazard Estimates In Central And Eastern United States On Existing Plants," Sept. 2, 2010; http://msnbcmedia.msn.com/i/msnbc/Sections/NEWS/quake%20nrc%20risk%20estimates.pdf.

<sup>6</sup> Lamont-Doherty Earth Observatory, "Earthquakes May Endanger New York More Than Thought, Says Study," August

25, 2008; http://www.ldeo.columbia.edu/news-events/earthquakes-may-endanger-new-york-more-than-thought-says-study <sup>7</sup> U.S. Energy Information Administration, New York Nuclear Profile, Last Updated September 2010:

http://www.eia.doe.gov/cneaf/nuclear/state\_profiles/new\_york/ny.html.

<sup>8</sup> Tom Zeller, Jr., "Experts Had Long Criticized Potential Weakness in Design of Stricken Reactor," *The New York Times*, March 15, 2011; http://www.nytimes.com/2011/03/16/world/asia/16contain.html

<sup>9</sup> Nuclear Energy Institute, "U.S. State by State Commercial Nuclear Used Fuel and Payments to the Nuclear Waste Fund," Updated 1/11;

http://www.nei.org/resourcesandstats/documentlibrary/nuclearwastedisposal/graphicsandcharts/usstatebystateusedfuelandpa ymentstonwf/

<sup>10</sup> James Kanter and Judy Dempsey, "Germany Shuts 7 Plants as Europe Plans Safety Tests," *The New York Times*, March 15, 2011.

<sup>11</sup> Professor Steve Thomas, PSIRU, Business School. University of Greenwich, London "The EPR in Crisis," (November 2010).

<sup>12</sup> See the 2009 New York State Energy Plan, <u>http://www.nysenergyplan.com/2009stateenergyplan.html</u> (December 2009) and the New York State Climate Action Plan Interim Report (November 9, 2010), http://www.nyclimatechange.us/InterimReport.cfm