

Nuclear Energy Policy

Democratic Party Nuclear Energy Policy Lurches from Woe to Woe. It Needs to Change.

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Even before the Japanese accident, ten years of strenuous federal subsidy and licensing shortcuts had produced neither a new reactor nor a license to build one. High costs and cheaper alternatives crumpled a 2008 bubble of more than 30 new reactors to four (at two sites) being actively pursued. Those four depend on Congress shifting billions in financial risk from investors to taxpayers through loan guarantees amounting to \$100 per American family per project.

Post-Fukushima administration leadership has amounted to Alfred E. Neuman's "What, me worry?" All 104 U.S. reactors will be reviewed in 90 days. More loan guarantees will issue. No reason to delay permits. Nuclear power "can't be taken off the table," whatever that means.

C'mon guys. A series of explosions and other events considered too unlikely to guard against just destroyed one percent of the world's nuclear capacity in four days on nationwide television. Benign winds and the fact that three reactors weren't operating have prevented a far worse calamity.

Dubious spent fuel pool location and protection are likely contributors to the ongoing radiation releases, clearly the worst since Chernobyl. A few years ago, the Nuclear Regulatory Commission refused to enhance U.S. spent fuel pool protections. One of its members leveled insults at the report questioning spent fuel pool safety. The NRC staff was ordered to "produce a hard hitting critique...that sort of undermines the study deeply."

The staff followed orders. But it's not the study that is undermined by those smoldering Japanese spent fuel pools. It's the NRC culture that preferred lashing out at its critics to taking them seriously, especially when doing so would require the nuclear industry to spend money.

Was this an isolated case? Not hardly.

After the NRC delayed closing the Davis Besse plant near Toledo, Ohio, for inspection, the reactor vessel was shown to have a significant rust hole

that left only a thin stainless steel liner holding in the cooling water. The NRC Inspector General concluded that the delay "was driven in large part by a desire to lessen the financial impact." The NRC staff official in charge was nominated by the Commissioners for the highest federal bonus.

A couple of years earlier Senator Pete Domenici, an ardent nuclear industry proponent, boasted of persuading the NRC to reverse its "adversarial attitude" by threatening a 33 percent budget cut during a meeting with the chair.

For 20 years now, ideology and campaign finance have weakened public protection of many sorts. President Obama seemed to recognize this when he campaigned against excessive nuclear industry influence at the NRC. His appointees are not implicated in the aforementioned episodes. But what a strange time to keep silent about this unfinished business.

Here are some ingredients of a sensible nuclear policy that reflects the promises of candidate Obama and the concerns of the American people.

Give real priority to learning and applying the lessons of Fukushima. The learning process took 18 months after the lesser accident at Three Mile Island, during which no new licenses were issued. It is likely to take at least as long this time.

Forget further subsidies during this review. Restrict any subsequent subsidies rigorously to "a few first mover reactors" as an MIT study recommended in 2003. A group of no more than six will be plenty to see whether new reactors are capable of producing economically competitive electricity.

Support advanced reactor designs only through research programs until real promise of improved safety and economics is demonstrated.

Acknowledge that new nuclear power has a lot to prove. Stop treating it as if it were a proven success.

If Democratic support for new reactors is to be bait for Republican support for energy efficiency and renewable technologies, stop giving away the store without getting anything back. Every Democratic nuclear moonshine is greeted by further Republican cuts in support for genuinely clean energy. As Casey Stengel said upon taking over the New York Mets, "Can't anyone here play this game?" ■

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Time to Pursue a Market-based Nuclear Energy Policy

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Though the nuclear crisis in Japan cannot be ignored, it should not deter the United States from moving forward with nuclear energy if it can be done in a safe, clean and economically rational way. Fifty years of domestic operations indicate that it can. 104 reactors operate in the United States, providing 20 percent of the nation's electricity. These reactors produce America's least expensive base load power and have done so very safely. Indeed, no one has died or been injured throughout commercial nuclear power's history.

Despite this success, the American new reactor construction business is largely dead. Each of America's reactors operating today was planned in the 1960s and 1970s. Even those few that have come online in the 1990s and 2000s began construction decades ago. This is because nuclear energy policies in the U.S. stifle nuclear's growth. Though these policies are often portrayed as representing a pro-nuclear versus anti-nuclear debate, the fact is that nuclear energy has enjoyed broad bi-partisan support for some time—at least prior to Japan.

The debate over nuclear energy really lies in how to move the technology forward and what role should the federal government play. Some policymakers support providing subsidies for companies willing to invest in nuclear energy. The problem with this approach is that it undermines motivation to address the underlying policy issues such as inefficient regulations and a dysfunctional waste management policy that have hindered new nuclear construction.

A better approach is to provide market-based reforms that promote innovation, create an efficient and predictable regulatory environment, and that rely on rational economic decision making. It would have the added benefit of allowing the government to focus only on ensuring safe operations through oversight rather than on the actual business of nuclear power.

To achieve this, America's policy makers should consider the following policies.

Reject additional subsidies. The Energy Policy Act (EPACT) of 2005 provides loan guarantees, standby support insurance to protect against government delays, and production tax credits to mitigate the effect of decades of regulatory uncertainty for approximately the first six new nuclear reactors built in the U.S. Unfortunately, this thinking has evolved into subsidy creep. If Congress truly wants nuclear energy to be sustainable, it should allow the industry to succeed on its own.

Enact an efficient permit process for new plants and reactor designs. Creating a permit schedule that at a minimum meets the current four-year timeline or even reduces it would bring regulatory stability to U.S. nuclear policy, which it has lacked for decades.

Congressman Devin Nunes (R-CA) recently introduced legislation to help. Establishing a more efficient permit process is not adequate, however. The NRC must also be better prepared to regulate reactor technologies beyond large light-water reactors. This lack of regulatory support is a major barrier to market entry for these technologies that may cost less, be more efficient, be safer or produce easier to manage waste.

Reform waste-management policy. The federal government's inability to fulfill its legal obligations under the 1982 Nuclear Waste Policy Act has often been cited as a significant obstacle to building additional nuclear power plants. Now is the time to break the impasse over managing spent nuclear fuel. The current system is driven by government programs and politics. There is little connection between used-fuel management programs, economics, and the needs of the nuclear industry. Any successful plan must grow out of the private sector, be driven by sound economics, and provide access to the funds that have been set aside for nuclear-waste management.

Demand that the Nuclear Regulatory Commission (NRC) reach a scientific conclusion on Yucca Mountain. Under any realistic waste-management scenario, there will be a need for long-term geologic storage. Unfortunately, the NRC has discontinued work on the Department of Energy's application to construct a repository at Yucca Mountain. Terminating the Yucca project without a backup plan was premature. At a minimum, the NRC should continue to review the program and determine its viability based on technical and scientific merits. Then the public will be better positioned to debate if the repository should move forward.

The first thing that policy makers must do in the wake of the nuclear crisis in Japan is ensure that regulators and industry have corrected any deficiencies at U.S. plants that were identified from Fukushima. It will be imperative, however, to ensure that the policy response does not result in stifling regulation that impedes the plant level innovation that has kept America's nuclear plants operating safely. Eventually, the discussion will turn to nuclear energy policy. When it does, policy makers must remember that the market works. We should allow it to work for nuclear power. ■



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