

No Nuclear Power Bailout



Too Cheap to Meter?

The last commercial reactor whose construction was completed in the U.S. was ordered in 1973. Rather than being “too cheap to meter,” as the nuclear industry promised, the high costs and financing defaults caused Wall Street and ratepayers to conclude that many planned reactors were too expensive. In addition, safety concerns resulted in significant public opposition to some reactors. Since no disposal sites for irradiated nuclear fuel exist, reactors are long-term waste storage facilities. Despite those enduring economic and safety problems, the George W. Bush Administration made the nuclear industry’s coveted “nuclear renaissance” a top priority.

Taxpayers At Risk Through Loan Guarantees

The 2005 Energy Policy Act contained \$7 billion in federal support for new reactors, including funds to pay for any delays during the construction of the first six new reactors and production tax credits for the first eight years of operations. The law also included extension of the Price-Anderson Act. This taxpayer-funded program provides government insurance and liability limits for the nuclear industry in the event of an accident, since the private insurance industry will not write such policies. The bill also set up a loan guarantee program. In 2007, Congress authorized \$18.5 billion in loan guarantees for new reactors and \$2 billion for new uranium enrichment facilities. Taxpayers are, in effect, the co-signers for these financially risky projects.

In its FY 2011 budget request, the U.S. Department of Energy (DOE) has asked to triple the nuclear loan guarantee program to \$54.5 billion. At approximately \$10 billion each, this amount would help finance only six to eight of the more than 30 new reactors being proposed.

History of Nuclear Reactor Loan Defaults

Moody’s Investor Services calls new reactors a “bet the farm” investment. The Congressional Budget Office (CBO) has predicted that more than half of new reactor owners will default on loan repayments. Yet, Energy Secretary Chu, when asked about the CBO analysis predicting more than 50% defaults on loans, said he was unaware of the report. Even making loan guarantees conditional upon a Nuclear Regulatory Commission license does not necessarily protect taxpayers. The nuclear industry has a long history of defaulting on loans in the post-licensing period due to design flaws, construction mistakes, cost overruns, lengthy delays, and other problems. In the past, 21 atomic reactors were cancelled during construction. Twenty-two more were cancelled after receiving a license but before construction began. One was even cancelled after construction had been completed.

Recommendations

- Stop the tripling of the federal loan guarantee program to \$54.5 billion for new reactors.
- Provide no additional loan guarantee authority for new reactors through CEDA.
- Institute Hardened On-Site Storage for irradiated nuclear fuel.
- Support phase-in of an efficient non-polluting renewable-powered energy system.

Unlimited Nuclear Loan Guarantees Would Undermine a Renewable Energy Future

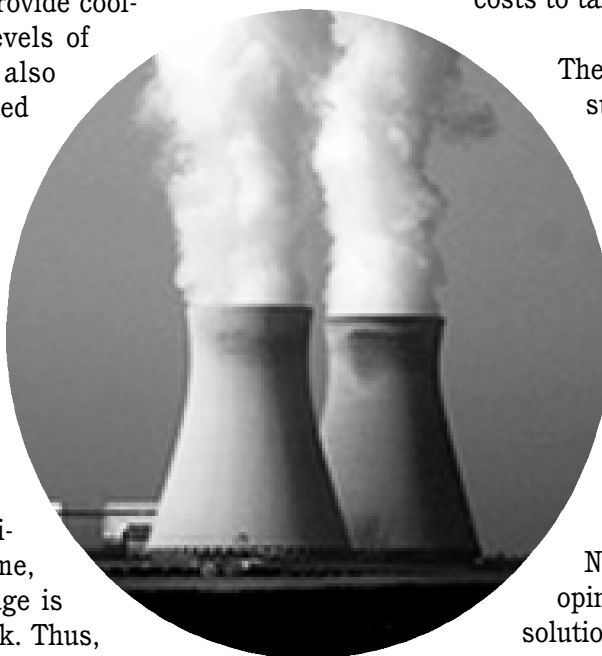
Both the House climate bill (H.R. 2454) and the Senate energy bill (S. 1462) would create a Clean Energy Deployment Administration (CEDA). That new entity would provide loan guarantees, in addition to indirect support measures, for energy technologies, including nuclear power. The Senate version of CEDA authorizes unlimited “self-pay” loan guarantees that will benefit large capital projects like new nuclear power facilities. Investing in risky nuclear power will undermine efforts to develop cheaper, faster, cleaner, and safer climate solutions: energy efficiency and renewables.

The CEDA legislation ignores an alternative path that would phase out nuclear power and fossil fuels by 2040 replacing them entirely with efficiency and renewables like wind, solar, and some forms of biomass. The feasibility of such an approach is documented in Dr. Arjun Makhijani's *Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy* (Institute for Energy and Environmental Research, 2007. Download at www.ieer.org/carbonfree).

Hardened On-Site Storage Improves Safety

Approximately 63,000 metric tons of irradiated nuclear fuel are stored at commercial reactor sites. For at least the first five years after use, such “spent” fuel is stored in water-filled pools to provide cooling and shielding from high levels of radioactivity. Most reactors also have dry storage, where irradiated fuel is placed in canisters.

Given that fuel will remain at many reactors for decades, Hardened On-Site Storage (HOSS) is a safer alternative to pools or dry cask storage. Irradiated nuclear fuel stored in densely packed pools risks catastrophic radioactivity releases, if the cooling water were to drain away due to accident or attack. At the same time, current outdoor dry cask storage is not designed to withstand attack. Thus,



the HOSS plan calls for pools to be thinned out and the wastes to be transferred to camouflaged, fortified, and high quality dry storage as soon as possible.

HOSS would reduce vulnerabilities for the next several decades. During that time wastes will inevitably remain at reactor sites, regardless of which direction national management policy goes, since it would take decades to transport wastes to an offsite facility even if one existed.

No radioactive waste should be shipped to interim, away-from-reactor storage unless the reactor site is unsuitable for a HOSS facility and the move increases safety and security. Well over 150 environmental groups have endorsed HOSS.

Blue Ribbon Commission

On January 29, 2010, DOE Secretary Steven Chu announced the membership of a long-awaited panel to re-evaluate U.S. radioactive waste management policy in light of the termination of the proposed Yucca Mountain repository. That "Blue Ribbon Commission on America's Nuclear Future" is badly imbalanced. Many members have ties to the nuclear industry. No one is from communities downstream and downwind of major nuclear weapons sites. Some commission members have been publicly in favor of reprocessing, which risks nuclear weapons proliferation, severe environmental contamination and health damage, as well as astronomical costs to taxpayers.

The Blue Ribbon Commission should support HOSS and recommend measures to ensure it is implemented at existing reactors, while long-term, scientifically sound, publicly acceptable approaches are developed. The Commission should also provide adequate funding to support the participation of independent experts, public interest, environmental, and public health organizations, and affected parties, including Native American tribes, in developing long-term waste management solutions.