



Auto Safety Group • Congress Watch • Energy Program • Global Trade Watch • Health Research Group • Litigation Group
Joan Claybrook, President

Sept. 6, 2007

Congress Should Not Bow to Nuclear Industry Demands for More Than \$50 Billion in Loan Guarantees to Build Nuclear Reactors

Senate's Energy Bill Would Allow Bush Administration to Bypass Congressional Authorization and Grant Guarantees on Unlimited Number of Highly Risky Projects

Although the nuclear industry is proposing to build new nuclear reactors in the United States for the first time in nearly 30 years, Wall Street has made it clear that experience with nuclear reactor construction in the 1960s and 1970s has made investors wary of putting money in such risky projects. So the nuclear industry lobbied the Bush administration and Congress to shift the massive financial risks of new reactors from investors to taxpayers. Lawmakers complied in the Energy Policy Act of 2005 (EPACT 2005). Among the more than \$13 billion in subsidies, tax breaks and other incentives for the construction of reactors in the statute, its Title XVII establishes a loan guarantee program under the U.S. Department of Energy (DOE).

This program authorizes the DOE to guarantee loans taken out by industry for 10 types of “new or significantly improved technologies” that are supposed to reduce greenhouse gas emissions. “Advanced nuclear energy facilities” are included in the list. Although nuclear power is only one of more than 10 eligible technologies, the nuclear industry is demanding a massive amount of taxpayer-backed loan guarantees – more than \$50 billion in the next two years. The risk of default on loan guarantees for new nuclear plants is “very high – well above 50 percent,”¹ according to a May 2003 Congressional Budget Office (CBO) report. At the same time, language slipped into the Senate energy bill (H.R. 6) passed in June would allow the DOE – which has been particularly close to the nuclear industry under the Bush administration – to give out unlimited guarantees without annual congressional authorization.

Unprecedented Taxpayer Handouts

In a June 16, 2007, floor statement, Rep. Pete Visclosky (D-Ind.), chair of the House Energy and Water Appropriations Subcommittee, referenced the excessive amount of guarantees sought by the nuclear industry:

“The request for guaranteed loans from the Nuclear Energy [Institute], subsidized by the Federal Government, is very large. It overwhelms what the [Energy & Water

¹ Congressional Budget Office cost estimate of S.14, Energy Policy Act of 2003, <ftp://ftp.cbo.gov/42xx/doc4206/s14.pdf>.

Appropriations] bill provides for the entire energy community. The administration had asked for a total of \$4 billion for the nuclear energy industry and the coal industry. This does not come close to what the Nuclear Energy [Institute] has indicated they need. The Nuclear Energy [Institute] indicates a need for \$25 billion in Federal guaranteed loans for fiscal year 2008 and more than that in fiscal year 2009.”²

These guarantees would go to a single, concentrated sector of a single industry. In comparison, the Export-Import Bank’s total portfolio of loan guarantees, which supports many industries in scores of countries around the world, never exceeded \$34 billion in any given year between 1994 and 2003.³

Although a company receiving a loan guarantee under this program is expected to pay the administrative cost and the “subsidy cost” of the guarantee (the net present value of the anticipated cost of defaults), estimating these costs will be extremely difficult. Under the Federal Credit Reform Act of 1990, any shortfalls in the subsidy cost will automatically be paid by U.S. taxpayers, with no congressional appropriations necessary. According to the Government Accountability Office (GAO), “the program could result in substantial financial costs to taxpayers if DOE underestimates total program costs.”⁴ A June 2007 CBO report found that “the challenges and constraints involved in estimating the subsidy costs for such innovative projects make it more likely that DOE will underestimate than overestimate the fees paid by borrowers” and that the overall portfolio can be expected to “have more projects where the subsidy fee has been underestimated than overestimated.”⁵

Energy Bills Override Congressional Oversight of Loan Guarantees

Under the Federal Credit Reform Act of 1990, congressional appropriators must provide authority to the DOE to commit to loan guarantees. But language slipped into the energy bill passed in June by the Senate (H.R.6) exempts the loan guarantee program from Sec. 504(b) of the Federal Credit Reform Act of 1990. Under the act, appropriators are required to cap the amount of loan guarantees granted in a fiscal year and if they choose not to cap it, then they are required to explicitly say that no cap has been set. Either way, Congress must act. But if the Senate provision were passed into law, appropriators would no longer have the authority to set an annual limit on these commitments, thereby allowing the DOE to give out unlimited guarantees without annual congressional authorization.

The House energy bill passed in July (H.R. 3221) does not contain this same provision, but it does limit congressional appropriators’ authority to exclude potentially eligible projects. This language was inserted in the House bill in response to the House FY2008 Energy & Water Appropriations bill, which does not approve loan guarantees for new nuclear reactors in fiscal year 2008. The House provision would prevent appropriators from being able to protect taxpayers from the most risky projects.

² http://frwebgate.access.gpo.gov/cgi-bin/getpage.cgi?position=all&page=H6713&dbname=2007_record

³ <http://www.cbo.gov/ftpdoc.cfm?index=5751&type=0&sequence=2>

⁴ <http://www.gao.gov/new.items/d07339r.pdf>

⁵ <http://www.cbo.gov/ftpdocs/82xx/doc8206/s1321.pdf>

Under both the House and Senate bills, the DOE must guarantee up to 100 percent of the cost of the loan, as long as the loan is no more than 80 percent of the cost of the project, and may not establish a lower percentage limit within its regulations. The DOE's current draft rule allows guarantees of up to 90 percent of the cost of loan, which means that 10 percent of the loan would not be guaranteed. According to the Nuclear Energy Institute in its comments to DOE on the draft rule, "One-hundred-percent loan coverage is essential to support the financing for the first wave of nuclear projects in the United States. ... Without 100 percent coverage under the Title XVII loan guarantee program, the capital markets are unwilling, now and for the foreseeable future, to provide on commercially viable terms the financing necessary."

Despite the industry's protests, the draft regulations mean that the federal government would still be guaranteeing \$3.6 billion of a \$5 billion nuclear plant, in addition to providing a host of other subsidies to underwrite much of the remaining project costs.⁶ Under a 90 percent loan guarantee, investors would have to bear just a bit more risk but would capture all of the profits from these projects. Given the high risk of default of these projects, especially nuclear reactors, this program could be the federal equivalent of the ongoing subprime mortgage debacle. Federal guarantees merely transfer this risk from investors to taxpayers; they do not make the risks go away. High default risks combined with federal guarantees and an inadequate process within the DOE to vet project risks is not a story that will end well for taxpayers.

The "Fix" in Loan Guarantee Regulations

The Office of Management and Budget (OMB), the White House office that can override agency decisions, has clearly had reservations about financial risks to taxpayers posed by the Title XVII loan guarantee program. In May 2007, the DOE released its draft regulations for implementing the loan guarantee program and is currently in the process of finalizing these rules. The DOE is not only proposing to guarantee up to 90 percent of the loans, but also to prohibit the guaranteed portion of the loan to be sold separately from the non-guaranteed portion (called "stripping") and to prohibit the subordination of non-guaranteed portion of a loan to U.S. taxpayers in the event of default (called "*pari passu* security structures"). All of these measures would provide at least some degree of protection for U.S. taxpayers, but the nuclear industry is dismayed with the DOE's draft rules, calling them "unworkable."

As a result of arm-twisting by Sen. Pete Domenici (R-N.M.), ranking member of the Senate Energy and Natural Resources Committee and the biggest booster in Congress for the nuclear industry, OMB has agreed to cave and put taxpayers at undue risk. After meeting with Domenici, President Bush's nominee to be the new director of OMB, former House Budget Chairman Jim Nussle (R-Iowa) promised to make changes to the final regulations. Domenici, who threatened to block the nomination, voted to confirm Nussle in committee after extracting these commitments. On Aug. 2, OMB Deputy Director Stephen McMillan wrote to Domenici to confirm that OMB would support guarantees for up to 100 percent of the loans and a "separate no-year loan volume amount for nuclear facilities" – meaning that any guarantees authorized for nuclear power in FY2008 do not have to be granted in FY2008 and could be used in future fiscal years. It appears that the nuclear

⁶ These subsidies include production tax credits, standby insurance, limited liability in the event of an accident or attack (Price-Anderson), and a decommissioning tax break, among others.

industry is not confident that it will have support for loan guarantees for new reactors with a new administration.

New Reactors Are Excessively Risky

All of the projects eligible for loan guarantees under this DOE program are risky, but nuclear power poses excessive financial risks to U.S. taxpayers. At an estimated \$4 billion to \$6 billion per reactor and with up to 80 percent of the cost of the project covered, \$50 billion in guarantees would cover at most 10 to 15 reactors. Historically, nuclear construction cost estimates in the United States were notoriously inaccurate – often by a factor of two or more – which makes setting an accurate subsidy cost even more difficult. The following table compares the estimated cost versus the actual cost:

Year Reactor Construction Started	Estimated Cost (1990\$)	Actual Cost (1990\$)	Percentage Over
1966-67	\$560/kW	\$1,170/kW	209%
1968-69	\$679/kW	\$2,000/kW	294%
1970-71	\$760/kW	\$2,650/kW	348%
1972-73	\$1,117/kW	\$3,555/kW	318%
1974-75	\$1,156/kW	\$4,410/kW	381%
1976-77	\$1,493/kW	\$4,008/kW	269%

Source: David Schlissel, Synapse Energy, Congressional Briefing, April 20, 2007

The same unwarranted optimistic estimates are being touted with plants being built in Europe and Asia. The French government-owned company Areva is currently building a 1,600 megawatt reactor in Finland, the same reactor design that the U.S. utility Constellation is planning to build in Maryland. Difficulties with plant construction, which was started in April 2005, have already caused the project to fall two years behind schedule and cost \$958 million over budget. The Finnish utility TVO fixed the contract price for this plant at 3 billion euros (\$4 billion in U.S. dollars).

The nuclear industry has received federal loan guarantees in the past – with detrimental results. In 1971, the Washington Public Power Supply System planned to build five reactors funded through tax-exempt bonds, some of which were guaranteed by power agreements with the Bonneville Power Administration (BPA). Four of the plants were never completed due to poor management and cost overruns, resulting in a \$2.25 billion bond default – the largest municipal bond default in history – and a BPA debt of more than \$6 billion. Northwest electric rates increased more than 500 percent in the five years following the default.

Even with all of the subsidies in the EPACT 2005, Wall Street has expressed serious concerns about the creditworthiness of companies that pursue new reactors. Standard & Poor’s concluded in January 2006 that “were a utility to embark on a new or expanded nuclear endeavor, Standard & Poor’s would likely revisit its rating on the utility.” Nuclear reactors are such risky financial propositions that the current slew of subsidies is insufficient to protect the credit rating of a utility that commits to building a new reactor.

Conclusion

The DOE has yet to hand out one loan guarantee, but the GAO has already found much to criticize about department's handling of the program.⁷ Clearly, given the large financial risks to U.S. taxpayers, Congress should retain its maximum oversight authority over the Title XVII loan guarantee program in the annual appropriations process, regardless of the type of project. Moreover, the Office of Management and Budget should not be permitted to be strong-armed by one senator to submit to the demands of the nuclear industry over the protection of U.S. taxpayers.

Nuclear power is a mature industry that has had a long history of utility loan defaults and cost overruns. These loan guarantees would put taxpayers – rather than investors – on the hook to pay back the loans should any of the plants default. After 50 years of massive federal taxpayer subsidies, enough is enough. Nuclear power now must stand on its own two feet in the marketplace.

Additional Information:

To read Public Citizen's press release, visit:

<http://www.citizen.org/pressroom/release.cfm?ID=2488>.

To read a summary of the House and Senate energy bills' loan guarantee provisions, visit:

<http://www.citizen.org/documents/SummaryLoanGuaranteeProvisions.pdf>

See the *New York Times* article on loan guarantees, "Energy Bill Aids Expansion Plans of Atomic Power," by Edmund L. Andrews and Matthew L. Wald, July 31, 2007.

See *The Washington Post* article on a proposal to build a reactor and citizen reaction, "Calvert Residents Keep Reactor Plans Under Close Watch," by Dan Morse, Sept. 5, 2007.

⁷ See Feb. 28, 2007, GAO letter to Chairman Pete Visclosky and Ranking Member David Hobson, House Energy & Water Subcommittee, <http://www.gao.gov/new.items/d07339r.pdf>.