Loan Guarantee Program Risks Billions of Taxpayer Dollars on Dirty Energy

The Department of Energy's Title XVII loan guarantee program was created through the Energy Policy Act of 2005 (EPACT 2005).[1] The program was billed as a way to get a small number of innovative, low-emission technologies off the ground, but has always been little more than a way for mature and environmentally harmful technologies that cannot compete on the open market to procure taxpayer handouts.

The program particularly has functioned as a massive subsidy for nuclear power plants. In fact, the program originated with the nuclear industry itself: unable to raise private financing for new nuclear reactors, the sector first tried to get its own loan guarantee program through the Energy Policy Act of 2003. Unable to get a "nuclear-only" loan guarantee program passed, the industry's champions in Congress simply expanded the program to include other technologies, thus creating Title XVII.

Today, the majority of the $51 billion in potential Title XVII loan guarantees have been earmarked for the coal and nuclear industries, a far cry from the program's purported objective of spurring new, innovative, and clean energy. In 2011, Congress stripped away any pretense that the program is technology neutral in the Republican House's Continuing Resolution (H.R. 1), which eliminated $25 billion in loan guarantee authority for Title XVII and specified that all the cuts would come from non-nuclear technologies. If passed the bill would have provided $22.5 billion to nuclear reactors and uranium enrichment and only $3.5 billion to all of the other technologies combined.

When the government gives a loan guarantee to a company, it functions like a parent co-signing for their child's mortgage - the government becomes responsible for the borrower's debt if the borrower cannot make its payments and defaults on the loan,

Technology	Amount in Billions
Nuclear Reactors	$18.5
Renewables	$18.5
Uranium Enrichment	$2.0
Carbon Sequestration (mostly benefits coal)	$6.0
Coal Gasification	$2.0
Unrestricted ($2 billion given to Uranium Enrichment)	$4.0
Total	$51.0

no matter what the cause. With Title XVII, the borrowers are often large corporations such as electric utilities, the loans are for billions of dollars and the co-signer is the U.S. taxpayer.

A co-signed mortgage allows people to buy houses they otherwise could not afford by relying on the co-signer's creditworthiness to lower interest rates. Similarly, loan guarantees allow companies to finance projects that banks would otherwise deem too risky by relying on the full faith and credit of the U.S. government. The risks of making a bad loan are passed from Wall Street banks to U.S. taxpayers; Wall Street is guaranteed a handsome profit regardless of whether the project is ever built. When defaults do occur, banks are paid back directly from the federal treasury with no Congressional oversight.

1 *Energy Policy Act of 2005 § 42 U.S.C § 16513 (2005).*

CONTACT: Ben Schreiber ~ Climate and Energy Tax Analyst ~ 202-222-0752 ~ bschreiber@foe.org

ISSUE BRIEF

Friends of the Earth

1100 15th St NW, Flr 11
Washington, DC 20005
202.783.7400(p)
202.783.0444 (f)

311 California St, Ste. 510
San Francisco, CA 94104
415.544.0790 (p)
415-544-0796 (f)

www.foe.org

Loan guarantees are subsidies

Loan guarantees are a government subsidy because they put taxpayer money at risk. The amount an individual loan guarantee is estimated to cost taxpayers is called the project subsidy cost. Conceptually, the project subsidy should amount to the lump sum cost of "insuring" the project's loan on the open market. However, the project subsidy cost is difficult to determine because loan guarantees go to projects that banks are unwilling to back on the open market.

DOE and the Office of Management and Budget (OMB) refuse to share their methodology for determining the project subsidy cost with the public. But theoretically, the project subsidy cost roughly should be the project's likelihood of default multiplied by the project's expected recovery rate (what percent of the loan can be recovered if a project goes belly up, for instance by selling off the project's assets). That calculation produces a figure called the "expected loss rate," which is how much the government can expect to lose from the loan guarantee. The expected loss rate, adjusted for inflation, plus the costs of administering the program roughly equals the project subsidy cost.

As an example, assume that the government gives a $10 billion loan guarantee for a nuclear reactor. Assume that the project will have a 50% likelihood of default and that 30% of the money spent will be lost if default occurs. The expected loss rate will be the product of those two, or 15%. The project subsidy cost, or the value of the loan guarantee and the estimated cost to taxpayers, will be roughly $15 billion.

Reactor Cost	Likelihood of Default	Percentage Lost	Project Subsidy Cost %	Value of Project Subsidy Cost
$10,000,000,000	50%	30%	15.0%	$1,500,000,000
$10,000,000,000	50%	55%	27.5%	$2,750,000,000

Under the Federal Credit Reform Act (FCRA), the cost of any loan guarantee, the project subsidy cost, must be paid for either by an appropriation from Congress or by another treasury intake.

Under Title XVII the project subsidy cost of a loan guarantee can be funded in two main ways:[2]

1. Congress can appropriate money to cover the project subsidy cost; or
2. Borrowers can pay the project subsidy cost to the federal treasury prior to receiving a loan guarantee, in what is known as a self-financed loan guarantee;

Congress has not appropriated any money to cover the project subsidy cost of Title XVII loan guarantees, although a temporary program, the 1705 program, was created in the American Recovery and Reinvestment Act to appropriate money for the project subsidy cost of mature renewable, efficiency and transmission technologies.

Self-financed loan guarantees are supposed to work like a giant insurance pool – the money that successful projects pay into the federal treasury system should cover taxpayers' losses for the money spent guaranteeing projects that default. This of course only works if the project subsidy cost for every project is calculated accurately. It also does not work if one or two large projects receive the bulk of the loan guarantees and one of these big projects defaults.

2 *Liquid Coal projects actually receive special treatment, allowing them to use money appropriated by Congress under the Clean Coal Power Initiative to pay the subsidy cost. Id.*

CONTACT: Ben Schreiber ~ Climate and Energy Tax Analyst ~ 202-222-0752 ~ bschreiber@foe.org

ISSUE BRIEF

Friends of the Earth

1100 15th St NW, Flr 11
Washington, DC 20005
202.783.7400(p)
202.783.0444 (f)

311 California St, Ste. 510
San Francisco, CA 94104
415.544.0790 (p)
415-544-0796 (f)

www.foe.org

How Much Can DOE Guarantee?

The Federal Credit Reform Act (FCRA) requires Congress to set a maximum level of risk that taxpayers can assume for any self-financed loan guarantees. Without FCRA DOE could give out unlimited loan guarantees without Congressional approval.

Currently, Congress has authorized DOE to cover $51 billion in self-financed loan guarantees under Title XVII. But while loan guarantees put taxpayers at risk for the entire value of the loan, they are not treated like normal government expenditures, and thus do not require Congressional appropriations for the full amount of the guarantee.

Rather, Congress only needs to appropriate a small portion of each loan guaranteed. The Congressional Budget Office (CBO) estimates that Title XVII will cost the government about 1 percent of the guaranteed amount for each loan; therefore, to authorize $51 billion in loan guarantees, Congress had to appropriate $510 million to DOE. Even though the program is supposed to be self-financed, CBO projects that DOE will underestimate the project subsidy cost by about 1% of the total loans guaranteed.

However, because of the structural problems inherent with this program, Title XVII likely puts taxpayers on the hook for far more than $510 million.

Structured to fail

Title XVII is structured to be a giant risk to taxpayers for several reasons:

- *Intrinsically risky projects*: The program is intended to guarantee loans to projects that are so uneconomical that they cannot get financing on the private market. This means that the program is designed to take on a portfolio of uncreditworthy projects; nuclear projects, for example, are expected to suffer a default rate of over 50 percent.[3]

- *Bias towards underestimating project subsidy costs*: Since the project subsidy cost is difficult to calculate, DOE probably will overestimate the project subsidy cost for some applicants, and underestimate it for others. According to CBO, borrowers "may turn down a guarantee if they believe DOE's fee is too high but go forward if they consider [it] too low. This also makes it more likely that DOE's loan guarantee portfolio will have more projects where the subsidy fee has been underestimated than overestimated."[4] As a result, DOE will likely not charge enough fees to cover the costs of defaults.

- *Mandate to approve projects*: According to CBO, if the company receiving a loan guarantee were truly paying the full project subsidy cost up front, then the company would be able to get the same terms on the private market and there would be no need for the program. However, DOE by design is giving out loan guarantees to projects that cannot get private funding, thus shifting risk from Wall Street onto taxpayers. Since DOE's mandate is to get projects out the door, there is a built-in programmatic incentive to underestimate the project subsidy cost.[5]

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

4 *Congressional Budget Office cost estimate of S. 1321, Energy Savings Act of 2007, http://www.cbo.gov/ftpdocs/82xx/doc8206/s1321.pdf.*

5 *"Having a federal loan guarantee would lower the cost of capital and improve a project's viability if the credit risk is shifted to the federal government. However, requiring the borrower to pay the subsidy fee shifts most of that risk and cost back to the project, leaving its creditworthiness largely unchanged. Because such projects are either uneconomic or marginally so without the guarantee, there is a practical limit to how large the subsidy fee can be without jeopardizing the project's financial prospects. In addition, prospective borrowers will have imperfect information about the risk associated with their proposals and may turn down a guarantee if they believe DOE's fee is*

CONTACT: Ben Schreiber ~ Climate and Energy Tax Analyst ~ 202-222-0752 ~ bschreiber@foe.org

ISSUE BRIEF

Friends of the Earth
1100 15th St NW, Flr 11
Washington, DC 20005
202.783.7400(p)
202.783.0444 (f)

311 California St, Ste. 510
San Francisco, CA 94104
415.544.0790 (p)
415-544-0796 (f)

www.foe.org

Implemented to Increase Risk

DOE has implemented Title XVII in ways that further worsen the risk to taxpayers.

- *Skirting guidelines designed to protect taxpayers*: The final rule for implementing Title XVII ignores OMB safeguards that are intended to protect taxpayers. In EPACT 2005, Congress limited the amount the government can guarantee to a maximum of 80 percent of a project's cost.[6] This ensures that anyone building a project has a financial stake in that project. OMB guidance also recommends that "private lenders who extend credit that is guaranteed by the Government should bear at least 20 percent of the loss from a default" to subject them to risk and provide an incentive to perform due diligence before lending.[7] In other words, no more than 80% of any loan (not the project cost) should be guaranteed. However, DOE's final rule for the Title XVII program allows for loan guarantees to cover 100 percent of a loan (not the project cost). This eliminates an important taxpayer safeguard. For a $10 billion reactor this means that an additional $1.6 billion of taxpayer money would be at risk (see chart below).

Project	Reactor Cost	Percent of Project Eligible	Percent of Loan Guaranteed	Percent Guaranteed by Taxpayers	Government Risk
OMB Guidance	$10,000,000,000	80%	80%	64%	$6,400,000,000
DOE Rule	$10,000,000,000	80%	100%	80%	$8,000,000,000

- *Allowing the build-up of technical risk in the portfolio*: DOE's rule further increases risk to the federal treasury by allowing multiple projects to go forward using the same untested and potentially flawed design. This concentrates risk within the portfolio, and means that taxpayers could end up on the hook for a multitude of failed projects.

- *Eliminating taxpayers' preferred creditor status*: The language of EPACT 2005 explicitly says that taxpayers' rights "shall be superior to the rights of any other person with respect to the property."[8] A plain English reading of this provision means that in the case of default, the federal treasury has the right to recover their losses before other creditors. However, in interpreting this rule, DOE has weakened this safeguard by voluntarily giving up the first right of lien and sharing any money recovered "pari passu," or in proportion, with the holders of the non-guaranteed portion of the loan.[9] This is the same flawed logic that DOE applied in administering the synthetic fuels loan guarantee program of the late 1970s and early 1980s, the last time it issued loan guarantees. The synthetic fuels corporation cost taxpayers billions of dollars.[10]

The DOE Title XVII loan guarantee program does little to live up to its billing as a promoter of real solutions to global warming and energy security, such as advancing renewable energy and energy efficiency. That's because the program was conceived from the start as a subsidy to mature and dangerous industries, and has been implemented in ways that put taxpayers on the hook for far more than planned originally planned. Congress should stop wasting billions of taxpayer dollars and end the Title XVII loan guarantee program.

Current as of 3/17/11.

too high but go forward if they consider to low. This also makes it more likely that DOE's loan guarantee portfolio will have more projects where the subsidy fee has been underestimated than overestimated." Id.

6 *Energy Policy Act of 2005 § 42 U.S.C § 16513 (2005).*

7 *OMB Circular NO. 1-129, revised, November 2000, http://www.whitehouse.gov/omb/circulars_a129rev/*

8 *Energy Policy Act of 2005 § 42 U.S.C § 16513 (2005).*

9 *Loan Guarantees for Projects that Employ Innovative Technologies, 72 Fed. Reg. 204, (Oct. 23, 2007) (to be codified at 10 C.F.R. pt. 609*

10 *Id.*

CONTACT: Ben Schreiber ~ Climate and Energy Tax Analyst ~ 202-222-0752 ~ bschreiber@foe.org

ISSUE BRIEF

Friends of the Earth

1100 15th St NW, Flr 11
Washington, DC 20005
202.783.7400(p)
202.783.0444 (f)

311 California St, Ste. 510
San Francisco, CA 94104
415.544.0790 (p)
415-544-0796 (f)

www.foe.org