

No. 2789 February 3, 2010



Conditions and Policy Reforms Must Accompany Nuclear Loan Guarantee Boost

Jack Spencer

President Obama's 2011 budget provides an additional \$36 billion in loan guarantee authority to nuclear energy projects. When added to the \$18.5 billion previously authorized under the Energy Policy Act of 2005, the American taxpayer will now be subsidizing \$54.5 billion in loans to the nuclear industry (if the budget is approved).

Loan guarantees can help overcome some nearterm financing obstacles, but they are subsidies. If not used prudently, they will only act to prop up non competitive industries. Furthermore, if they are not accompanied by policy reforms, they would simply magnify the uncertainty caused by the underlying policies that make private financing difficult to attain in the first place.²

Tolerable to a Degree. The clean energy loan guarantee program, under which the nuclear program resides, was created in 2005 to help move new, clean energy sources toward market viability. A limited loan guarantee program that allowed industry and government to share risk while working through some remaining issues (such as waste disposal and unpredictable regulation) seemed appropriate.

Expansive loan guarantee programs, however, are wrought with problems. At a minimum, they create taxpayer liabilities, give recipients preferential treatment, and distort capital markets. Further, depending on how they are structured, they can remove incentives to decrease costs, stifle innovation, suppress private-sector financing solutions, perpetuate regulatory inefficiency, and encourage government dependence.

President Obama's expansion would transform the limited program into a much broader one that threatens to institutionalize the inefficiencies that subsidies create. Most basically, the incentive to reform problematic regulations and policies, such as the prolonged and unpredictable permitting process, is diminished, because the loan guarantee protects investors against the risk posed by those policies. So instead of providing a near-term transition from an unstable past to a viable future during which policy reforms would take place, the loan guarantee program would simply perpetuate the systemic inefficiencies and risk that gave rise to the need for the subsidy to begin with.

How to Make Loan Guarantees More Tolerable. The United States energy consumer and taxpayer would be best served by the federal government simply resolving outstanding regulatory issues. This would increase investor confidence and reduce the need for expanded loan guarantees. However, if Congress moves forward with loan guarantees, accompanying them with the following conditions would help reduce their market distorting effects.

End Further Loan Guarantees. Transforming a limited program into a permanent subsidy virtually

This paper, in its entirety, can be found at: www.heritage.org/Research/EnergyandEnvironment/wm2789.cfm

Produced by the Thomas A. Roe Institute for Economic Policy Studies

Published by The Heritage Foundation 214 Massachusetts Avenue, NE Washington, DC 20002–4999 (202) 546-4400 • heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.



guarantees that the negative potential impacts of loan guarantees will come to pass.

Expanding the program by \$36 billion already diminishes near-term support for reform efforts. Stopping the program at \$54.5 in total loan guarantees would at least limit the damage and provide a deadline whereby industry and government must have resolved their outlying issues.

Ensure That Recipients Pay the Full Cost of the Subsidy. As the program stands, loan recipients are responsible for paying the subsidy costs—a determination of the long-term liability to the federal government of the loan guarantee. The cost, which is calculated based on the risk of default and taxpayer losses as a result of default, is required to be paid either by an appropriation to the Department of Energy or by way of payment from the guarantee recipient.

The President's budget did not request funds to pay for the subsidy cost, however, legislation introduced over the past year has.³ This legislation was the result of controversy over what the actual subsidy costs should be. Industry argued that it should cost 1–2 percent of the project, whereas nuclear critics argued that it should be closer to 50 percent. Accurately assessing the risk will ensure that the market integrity of nuclear power is sustained and reflect the true risk associated with nuclear power.

Given that problematic public policy has caused much of the risk associated with new nuclear plants, a true financial assessment should provide a market incentive to reform the policies that give rise to the risk to begin with. This will occur, however, only if the true cost of the subsidy is assessed and if guarantee recipients are responsible for paying that cost.

Make Recipients Privately Refinance within Five Years of Project Completion. The most compelling argument for loan guarantees is that political and regulatory unpredictability have made competitive private financing difficult to secure. Since government is a primary source of this unpredictability, it is only fair that government offset the costs associated with high risk.

But once the project is complete, that risk should be eliminated. Thus, rather than a long-term financing option, the loan guarantee program should be viewed as a bridge program that helps to protect investors against project failure during its most vulnerable stage: licensing and construction. Upon completion, loan recipients should privatize liability by privately refinancing without support of additional taxpayer backing.

Limit Guarantees to No More Than Two Plants of Any Reactor Design. Establishing regulatory integrity should substantially reduce the risk associated with bringing innovative technologies to market, thus removing the need for a loan guarantee. Completing the permitting process for two plants that share a single reactor design should be sufficient to establish that integrity.

Therefore, Congress should limit loan guarantees to no more than two plants of any reactor design. This will also ensure that no one reactor design monopolizes the program and that federal regulators diversify their regulatory experience.

Limit to Two-Thirds (\$36 Billion) of the Loan Guarantee Program That Can Support a Single Technology. Because regulatory support is a necessary prerequisite to reactor use and the regulatory environment favors large, light water reactors (LWRs), nuclear investors tend toward this technology as it poses the least regulatory risk. Ensuring that the subsidy is not consumed by a single reactor type should help to break the regulatory monopoly currently held by LWRs by lowering the relative risk of emerging commercial nuclear technologies.

^{3.} Although the President's budget did not request funding to cover the subsidy costs for nuclear loan guarantees, it did request \$500 million to cover the subsidy costs for renewable projects. This funding should be eliminated. The Clean Energy Act of 2009, introduced by Senators Lamar Alexander (R–TN) and James Webb (D–VA), authorized \$10 billion to fund the subsidy cost of the \$100 billion nuclear loan guarantee program offered in that legislation.



^{1.} A loan guarantee is not a direct loan from the federal government, and the full amount would not be budgeted. The taxpayer is held liable for the loan amount only if the recipient defaults.

^{2.} See Jack Spencer, "The Problem with Increasing Energy Loan Guarantees," Heritage Foundation WebMemo No. 2277, February 6, 2009, at http://www.heritage.org/Research/EnergyandEnvironment/wm2277.cfm.

As the Nuclear Regulatory Commission (NRC) builds regulatory expertise to meet this demand, it will be breaking down one of the primary barriers that small and modular reactors currently face: a lack of regulatory support.

Good, but Not Enough. While adding these conditions would improve an expansion of loan guarantees, they would not be enough. Policy reforms to address the risks that caused the demand for loan guarantees to begin with are also necessary.

It is essential that the loan guarantee program be accompanied by measures that find a solution for waste management, make the regulatory process more efficient, and equip the NRC to regulate multiple reactor technologies. Without these reforms, the guarantees would simply serve to perpetuate those bad policies.

—Jack Spencer is Research Fellow in Nuclear Energy in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.