

WebMemo



Published by The Heritage Foundation

No. 2899
May 14, 2010

Too Many Subsidies Mar Otherwise Good Nuclear Title of Kerry–Lieberman Bill

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Senators John Kerry (D–MA) and Joe Lieberman (I–CT) released their much-awaited climate and energy bill, the American Power Act (APA), on May 12. While the economic harm caused by the bill's cap-and-trade-provisions makes it a non-starter, the nuclear title, with modification, provides a good start for a separate nuclear bill.

Strong on Regulatory Reform. The bill requires the Nuclear Regulatory Commission (NRC) to submit a report to Congress within 90 days of enactment that would specify how to expedite the process for attaining a combined construction and operating license—the permit needed to build and operate a nuclear power plant. This streamlined process would greatly diminish the regulatory risk associated with nuclear power.

Currently, plant licensing is built around large light water reactors, essentially discouraging all other technologies. The bill also requires the NRC to develop a set of technology-neutral guidelines for future nuclear plant licensing, helping to open up the regulatory system to new potentially less expensive or more versatile nuclear technologies.

Though this provision is a good first step, unfortunately the bill does not require the NRC to develop a separate certification pathway for non-large light water reactor designs. Without regulatory support, few customers would ever pursue a new reactor technology without massive subsidies. Establishing an alternative licensing pathway could help build the necessary regulatory support on which commercialization ultimately depends.

Other provisions help to speed the permitting process. For example, the bill would allow construction permits to be granted without administrative hearings for non-contested issues. Currently, these hearing must take place even if no parties raise objections to the project, needlessly adding time to the permitting schedule. It would also allow environmental work that is done at the early part of the permitting process to be used later on, which is another common-sense time saver.

A Potential Good Start on Spent Fuel Recycling. The bill requires the Department of Energy (DOE) to designate a national laboratory as a spent fuel recycling research and development center of excellence. Nuclear fuel recycling expertise is currently housed in multiple places throughout the national laboratory system. Consolidating this expertise under one roof makes sense. However, the organization's focus should be on R&D and should not move toward commercialization of recycling technologies, which should be left to the private sector.

The federal government is currently responsible for nuclear waste disposal. This system has two major flaws: First, it stifles competition. If utilities

This paper, in its entirety, can be found at:
<http://report.heritage.org/wm2899>

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

Published by The Heritage Foundation
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Washington, DC 20002–4999
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were responsible for their own waste, they would have the incentive to look for new nuclear technologies that minimized waste management costs. Second, it subjects waste management decisions to the federal bureaucracy and all of the inefficiencies thereof. The federal government has been responsible for nuclear waste since 1982, and despite having collected nearly \$30 billion for that purpose, it is no closer to a waste solution today than it was 28 years ago. Unfortunately, the APA fails to address this underlying problem.

Lastly, the APA makes no mention of the nuclear waste repository at Yucca Mountain, which President Obama is attempting to terminate. If he is successful, the U.S. will have no waste disposal plan. And without a plan, U.S. reactors may not be allowed to operate. Therefore, any comprehensive nuclear bill should either support further development of Yucca or clearly define an alternative.¹

Subsidies! Get Your Subsidies Here! The Energy Policy Act (EPACT) of 2005 provides a host of subsidies to mitigate the effect of decades of regulatory uncertainty for approximately six newly constructed nuclear reactors built in the U.S. The APA unnecessarily expands the EPACT 2005 subsidies to include help for approximately six more new reactors, bringing the total to 12. Among the new handouts:

- **Loan guarantees.** A limited loan guarantee program can help overcome some near-term financing obstacles, but the APA's expansion to \$54 billion in loan guarantee authority would transform the limited \$18.5 billion program into a broader one that threatens to institutionalize the inefficiencies that subsidies ultimately create. Any expansion of loan guarantees should be accompanied by conditions that would prevent the subsidy from being applied disproportionately to a single technology or reactor design.²
- **Tax credits.** The APA offers a host of tax subsidies. The problem is that tax subsidies simply

distort economic incentives in favor of the politically favored industry. Instead of providing a vast array of tax credits for various energy sources, Congress should simply allow investors to take an immediate tax deduction for all new plant and equipment costs.

- **Standby support insurance.** EPACT 2005 provides \$2 billion in insurance coverage for six nuclear plants (\$500 million each for the first two plants, \$250 million each for the next four). The APA would expand that number, covering a total of 12 plants for up to \$500 million each. Instead of expanding coverage, Congress should allow the DOE to replace old contracts that expire without claims being paid with new ones for new projects, so long as there are no more than six total insurance contracts at any one time and the total insured amount does not exceed \$2 billion (the amount authorized by EPACT 2005).

The Nuclear Energy Research Initiative Is the Wrong Approach. The APA mandates that the DOE lower the cost of small and modular reactors by developing cost-efficient manufacturing and construction techniques through the Nuclear Energy Research Initiative. The problem is that the DOE is neither qualified nor capable of taking on such tasks. These are activities that should reside solely in the private sector. Subjecting them to government bureaucracy would merely impede their development and eventual adoption.

The APA also directs the DOE to address licensing issues for small and modular reactors. This provision could be value-added if properly implemented. Critically, the DOE should not decide which technologies are worthy of certification. To be successful, the program should provide broad technical assistance to any reactor designers seeking to attain NRC certification.³

Incomplete on Free Trade. The APA extends duty suspensions for certain nuclear components that are not domestically produced. While efforts to

1. For a comprehensive waste management plan, see Jack Spencer, "A Free-Market Approach to Managing Used Nuclear Fuel," Heritage Foundation *Background* No. 2149, June 23, 2008, at <http://www.heritage.org/research/reports/2008/06/a-free-market-approach-to-managing-used-nuclear-fuel>.

2. See Jack Spencer, "Conditions and Policy Reforms Must Accompany Nuclear Loan Guarantee Boost," Heritage Foundation *WebMemo* No. 2789, February 3, 2010, at <http://www.heritage.org/Research/Reports/2010/02/Conditions-and-Policy-Reform>.

reduce tariffs are always good, this provision is incomplete and confusing. Its justification for lifting the tariff is a lack of U.S. suppliers, but some of the components listed, such as heat exchangers and vessel heads, are domestically available.

This does not mean that the tariff should not be lifted, but it does mean that the stated rationalization of the provision is questionable. Secondly, the tariff reduction provision should be accompanied by an effort to open foreign markets and to reduce foreign tariffs. This becomes especially important if the tariff being lifted is on a product that is domestically available.

A Good Starting Point for a Nuclear-Only Bill. The Kerry–Lieberman American Power Act is wrought with problems that will lead to higher energy prices and fewer jobs for Americans. However, lawmakers in search of good energy policy should consider the bill’s nuclear provisions as a stand-alone measure. With certain modifications, these provisions represent a good starting point for nuclear-only legislation.

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3. See Jack Spencer, “Senate Attempts to Promote Small Nuclear Reactors Fall Short,” Heritage Foundation *WebMemo* No. 2733, December 14, 2009, at <http://www.heritage.org/Research/Reports/2009/12/Senate%20Attempts%20to%20Promote%20Small%20Nuclear%20Reactors%20Fall%20Short>.