

# WebMemo



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## The American Energy Act Puts Nuclear on the Fast Track

*Jack Spencer*

The American Energy Act (AEA), introduced today by House Republicans, puts forth a pro-market agenda that allows nuclear energy to compete based on its merits, such as being affordable, domestic, and emissions-free.

To do this, the AEA would:

- Provide an efficient, predictable, and expedited pathway to permitting new reactors;
- Suspend tariffs on imported reactor components;
- Provide the Nuclear Regulatory Commission (NRC) the authority to complete its review of the Yucca Mountain repository;
- Repeal the artificial limitations on Yucca Mountain's capacity; and
- Provide an avenue to start recycling spent nuclear fuel in the U.S.

**Reducing Red Tape and Increasing Technological Innovation.** The AEA will cut in half the amount of time necessary to permit a new nuclear power plant. The current schedule for new plant permitting—which has already been streamlined—takes approximately four years, assuming everything goes according to plan. The problem with the current strategy is that it treats all applicants the same when, in fact, each applicant is very different.

The AEA allows those permit applicants that are committed to building a reactor in the short term and have met certain conditions to get their Combined Operations and Construction License in about half the time. This speedier process should

cost less, be more predictable, and bring Americans more emissions-free nuclear power sooner.

The legislation would also help bring new reactor technologies into the marketplace. First, it directs the NRC to develop a certification schedule for new, innovative reactor designs.

The bill would also create a National Nuclear Energy Council. Currently, no comprehensive policy on nuclear energy issues exists. The result is often a confusing application of policy in real-world situations. This is further complicated when multiple government stakeholders have different interpretations of different issues. Having an entity to coordinate the federal government's policy with the needs of the nuclear industry could prove invaluable.

**Reducing Tariffs.** The United States has a very limited nuclear industrial base today because no new nuclear plants have been ordered for over three decades. While this is beginning to turn around, much remains to be done and putting tariffs on goods that are not produced domestically helps no one.

The AEA would do much to promote the expansion of nuclear power by suspending for five years all tariffs on any nuclear component that is not currently produced in America. Ultimately, U.S. policy

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[www.heritage.org/Research/EnergyandEnvironment/wm2477.cfm](http://www.heritage.org/Research/EnergyandEnvironment/wm2477.cfm)

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214 Massachusetts Avenue, NE  
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(202) 546-4400 • [heritage.org](http://heritage.org)

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should strive for a tariff-free world; however, the AEA moves the nation in that direction and will reduce the cost of nuclear power in the process.

**Yucca Mountain Construction Permit.** Under any realistic waste management scenario, there will be a need for long-term geologic storage. President Obama has publicly supported nuclear power with the caveat that waste storage and management be based on sound science.

Despite this, the Administration has stated that Yucca Mountain is no longer a possibility. Since the NRC has not finished its review of the Department of Energy's application for a permit to construct the repository at Yucca Mountain, the President's rejection of Yucca seems premature. This has led to significant speculation as to whether the Administration would continue to support the NRC's Yucca review process.

The AEA removes any speculation about the NRC's review of the application by providing specific direction to the commission to finish the review.

**Removing Artificial Capacity Limits on Yucca Mountain.** The United States has 60,000 tons of high-level nuclear waste stored at more than 100 sites in 39 states<sup>1</sup>, and its 104 commercial nuclear reactors produce approximately 2,000 tons of used fuel every year.

The Yucca Mountain repository's capacity is statutorily limited to 70,000 tons of waste. Of this, 63,000 tons will be allocated to commercial waste, and 7,000 tons will be allocated to the Department of Energy. These congressionally mandated limits were set without regard to Yucca's actual capacity, which is much larger than the current limit.

The AEA repeals the 70,000-ton limitation and instead allows technology, science, and physical capacity to determine the limit.

**Recycling Nuclear Fuel.** Current U.S. policy is to dispose of America's spent nuclear fuel without any further processing once it is removed from the reactor. Not only has this system not worked, but as the AEA recognizes, it is a waste of resources.

To create power, reactor fuel must contain 3–5 percent enriched fissionable uranium (U-235). Once the enriched fuel falls below that level, it must be replaced. Yet this "spent" fuel generally retains about 95 percent of its original content, and that uranium (along with other byproducts in the spent fuel) can be recovered, recycled, and used again. Indeed, many countries—such as France, Great Britain, and Japan—already recycle their nuclear fuel.

Although the AEA does not fully resolve the problem, it makes significant progress toward a sustainable solution. First, it allows money that the federal government has collected for waste disposal to be spent on nuclear fuel recycling. It also permits the Department of Energy to enter into long-term contracts with nuclear fuel recycling firms, which will provide the predictability necessary for the private sector to invest in a nuclear fuel reprocessing plant. While a fully privatized system would work better and be more sustainable, the system set up by the AEA is a significant step forward.

**Uranium.** The U.S. Department of Energy controls large amounts of uranium that is not needed for national security purposes. The AEA directs the Energy Department to undergo an audit to account for this uranium. The AEA then uses this uranium to create a reserve that could be tapped should a foreign supplier—or something else—disrupt America's uranium supplies. While establishing such a reserve makes sense, the legislation should allow for this uranium to eventually be introduced back into the marketplace.

**A New Approach to Nuclear Energy Policy.** The American Energy Act represents a turning point in American nuclear energy policy. Instead of using subsidies to help make nuclear energy more competitive, the AEA largely relies on economically sound, market-based proposals. While subsidies might give the United States a handful of reactors, the market-based policies proposed in the AEA puts the U.S. nuclear renaissance on the fast track.

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

1. Samuel W. Bodman, U.S. Secretary of Energy, letter to Nancy Pelosi, Speaker of the U.S. House of Representatives, March 6, 2007, at <http://www.energy.gov/media/BodmanLetterToPelosi.pdf> (June 10, 2009).