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Pitts Bill Could Be Nuclear Energy Game Changer

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On July 31, Congressman Joe Pitts (R–PA) introduced the Streamline America's Future Energy Nuclear Act, which brings a fresh approach to U.S. nuclear energy policy. Instead of the well-worn subsidy-first approach that often dominates congressional attempts to support nuclear energy, Congressman Pitts's bill focuses on reforming the arduous regulatory and policy environment so that the nuclear renaissance can flourish.

Puts Nuclear Energy on the Fast Track. The current permitting process to build new reactors is a product of a streamlining effort established by the Energy Policy Act of 1992, but it is still proving to be too slow. The SAFE Nuclear Act, while not taking resources away from those that choose to pursue the current four-year permitting schedule, would create a second permitting track that would allow for a permit to be issued in approximately two years.

The SAFE Nuclear Act would allow permit applicants that meet certain conditions to enter into the expedited program. To be eligible, applicants must:

- Construct a reactor in which the design has already been certified by the Nuclear Regulatory Commission (NRC);
- Build the new reactor on or adjacent to a site where reactors already operate;
- Not be subject to any NRC actions to revoke operating permits; and
- Have submitted a completed combined construction and operating license permit application (COLA) that has been docketed by the NRC.

The expedited process would entail the issuance of a draft Environmental Impact Statement (EIS)

within 12 months of the application being docketed and the final EIS within 18 months.

Further, hearings over contested application issues would begin once the draft EIS is issued rather than after the final EIS. This would allow the NRC and applicant to resolve contested licensing issues within 24 months of the application being docketed.

The bill also calls for the Safety Evaluation Report, NRC's application technical review report, to be completed within 18 months of the application being docketed. While such timeframes would be tight, with close coordination between the applicant and the NRC, it should allow for a significantly shortened process.

A Foundation for a True Nuclear Renaissance.

The SAFE Nuclear Act would also lay the ground-work for a true nuclear renaissance. For the United States to reestablish its leadership in the commercial nuclear sector, it must begin researching, developing, and commercializing new nuclear technologies. The SAFE Nuclear Act would move toward that end in a number of ways.

It Would Open the Marketplace to New Technologies. First, the bill begins to break down one of the primary obstacles that new reactor technologies have in entering the marketplace: a lack of regulatory support. The current NRC does an outstanding

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job of regulating large light-water reactors, 104 of which operate in the U.S. today, but it performs inadequately in developing regulations that would allow new technologies into the marketplace.

Without this regulation, new technologies are effectively banned because customers are hesitant to buy reactors that the NRC will not regulate, and the NRC does not want to put its resources toward a reactor technology that has no customers. The result is that new nuclear technologies are at a severe disadvantage.

To begin changing this, the SAFE Nuclear Act would direct the NRC to develop a set of guidelines for technology neutral nuclear plant designs. Instead of mandating that a specific nuclear technology be wedded to a specific plant design, the new guidelines would allow for other nuclear reactor technologies to be used in a nuclear power plant, creating a significant step toward building a more diverse and competitive nuclear industry.

It Would Develop Human Resources. To better regulate a growing and diverse nuclear industry, the NRC should develop a new generation of regulators. It is not enough, however, to simply pluck technology-specific experts out of industry or academia. Not only should the NRC have technical experts; these experts should also be trained as regulators.

To ensure that the NRC has ample human resources to support its new regulatory direction, the SAFE Nuclear Act would direct the commission to focus a portion of its educational funding on developing the regulatory and technical expertise that it will need for a more diverse future. It also directs the Department of Energy (DOE) to devote some of its educational funding toward the same end.

It Would Create a National Nuclear Energy Council. No comprehensive policy on nuclear energy issues exists at the federal level. The result is often a confusing application of policy in real-world situations because multiple government stakeholders, such as the DOE and the Department of State, often 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.

It will be critical, however, that the council not devolve into a subsidy development organization.

The Energy Policy Act of 2005 has already established substantial subsidies—such as loan guarantees, production tax credits, and insurance against government delays—to help mitigate some of the risk of initial investors. Expanding subsidies would simply lead to government dependence, higher prices, and less innovation.

It Would Expedite Existing DOE Programs. Nuclear Power 2010 (NP2010) and the Next Generation Nuclear Plant (NGNP) are the DOE's top nuclear development and commercialization programs. The SAFE Nuclear Act would efficiently bring both to fruition.

NP2010 began in 2002 as a public/private partnership to bring an advanced light-water reactor on line by 2010. This is not close to happening, but the program has made significant progress toward addressing the technical and regulatory challenges that faced the industry at the program's inception. The SAFE Nuclear Act would fully fund one more year of the program but then brings it to an end, which would allow the program to meets its goals without transforming into a corporate handout.

The SAFE Nuclear Act also accelerates NGNP, which is a public/private cost-sharing technology development program that focuses on high-temperature gas-cooled reactor (HTGR) technology. Unfortunately, the program relies on a nine-year licensing timeline that would not allow for a new HTGR reactor to come on line until 2021. The SAFE Nuclear Act calls on program managers to develop a funding and development schedule that would allow for the program to conclude as early as 2015.

A New Era of Nuclear Energy. The SAFE Nuclear Act represents a turning point in American nuclear energy policy. Instead of using subsidies to help make nuclear energy more competitive, the SAFE Nuclear Act puts forth a set of economically sound, market-based proposals. While subsidies might give the United States a handful of rectors, the market-based policies proposed in the SAFE Nuclear Act would put the U.S. nuclear renaissance on the fast track.

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