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CONGRESSIONAL TESTIMONY

Oversight and Management of Department of Energy National Laboratories and Science Activities

Oral Testimony before
Committee on Science, Space and Technology Subcommittee on Energy
United States House of Representatives

9:30 am
July 11, 2013
Rayburn House Office Building
Room 2318

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My name is Jack Spencer. I am a Senior Research Fellow at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

I would like to take a moment to thank Chairman Lummis, Ranking Member Swalwell, and Members of the Subcommittee for the opportunity to speak with you today about this very important issue.

The work that ultimately became the *Reimagining* report began some three years ago. At Heritage, we were becoming concerned that America's government research enterprise was getting off track. We felt that it was quickly becoming a mechanism to subsidize private sector research, to advance fleeting political agendas or even used to payback special interests.

Some colleagues and I decided to really dissect the Department of Energy (DOE) budget. As we looked, we began identifying significant duplication and inefficiency within the budget. Beyond that, we found a lot of spending on programs that were simply unnecessary.

These problem areas fell roughly into four categories:

Commercialization. These are programs whose purpose is to bring a new technology into the marketplace. This failed model essentially consists of a technology gaining political support. That support is then translated into a program whose purpose is to bring that technology into the market. These technologies are generally subsidized in other ways as well. For example, if people won't buy them, the government mandates them. Or if they cost too much, the government hides the costs with some tax preference, grant or loan guarantee. As a result, these technologies begin to incorporate and depend on subsidies in their business models, meaning that they never seem to quite be ready to stand on their own. Government research can lead to commercial products. GPS is a good example. The difference is that technologies like the GPS were developed to meet a government need and then were commercialized by the private sector;

Duplication. This is more straight forward and fairly self-evident. But essentially, these are programs whose purposes or objectives are approximated in multiple places across government;

Politicization. Some programs do little more than advance political agendas. The agenda could be green jobs, energy independence, climate change or any number of other policy interests that we have seen ebb and flow over the years. The problem here is not the objective per se but rather the government's ability to manage markets to achieve it. These agendas are more often than not merely slogans attached to spending programs to justify their existence. They almost never leave the nation better off and often do just the opposite; and

Subsidization. Whether to improve manufacturing processes, extend plant lives or conduct specific research to solve commercial problems, a large amount of Department of Energy spending is quite simply finances activities that the private sector should shoulder. Indeed, from my perspective, there is almost no reason to use taxpayer money to offset the costs of private research requirements.

Simply creating a list of programmatic reductions, however, was not enough. While reductions are important, the DOE really needs reform.

Though the *Reimagining* report is decidedly nonpartisan and unapologetically appeals to stakeholders across the ideological spectrum, in developing the report my objective was to ensure that its recommendations were consistent with a conservative, free-market vision.

Doing so required that the recommendations:

Decentralize power. Micromanagement does not work. As a conservative, I believe that those on the ground, close to the problem, if given clear direction are best positioned to successfully carry out a mission. Of course, there is risk involved with this approach. But there is also great reward. The key is to minimize the risk. One way to do this is to properly align incentives.

Properly align incentives. If greater freedom is afforded to manage a public asset, then managers must be held to greater levels of liability and responsibility. Simply increasing responsibility, however, is not adequate. The increased responsibility must be coupled with increased reward opportunity. This requires that the reforms be market based.

Recognize the power of markets. Harnessing the strength of the market must be central to any reform effort. Too often government policies fight the market. These policies try to push products or technologies that have little appeal to consumers, disrupt the technological development process through subsidies or create some other market distortion that ultimately must be undone. Though it'sa lesson that the government seems never to learn, the fact is that not even the U.S. government can beat the market in a fight.

Taken together, our recommendations fix each of the problems that I laid out earlier while maintaining a coherent conservative vision.

I'd now like to take a few minutes to discuss some of the recommendations that I believe are most salient.

First, we reorganize the Department of Energy research bureaucracy into a single, unified Office of Science and Technology. This is critical from a conservative, limited government perspective. Roughly speaking, the bureaucracy currently consists of separate entities that conduct basic research and those that conduct applied research. The applied research generally includes activities that are further along the technology development spectrum and are theoretically closer to commercialization. This is the type of research that the private sector should shoulder. By removing the bureaucracy created specifically to support those activities, we begin to diminish the institutional bias towards it. This does not eliminate applied research from the Department of Energy necessarily. Those of us who oppose it will continue to fight that fight on a program-by-program basis.

Secondly, we drastically reduce Washington micromanagement of the labs. Currently, lab managers must follow arcane bureaucratic rules that drive up costs, increase bureaucracy, and perpetuate general inefficiency. We recommend a performance-based contracting system where the contractors are free to meet their contractual obligations largely as they see fit, rather than by prescriptive oversight from DOE.

And finally, we free lab management contractors to engage with the private sector, universities or other agencies based on market demand and allow them to keep a portion of the revenues as part of their management fee. The federal government today largely pushes research into the market. Our approach creates a market incentive to transfer technology out of the labs. For conservatives, it promotes near-term spending cuts by removing the need for taxpayers to fund research facilities needed by third parties. Our approach allows third party users to pay directly for those services thus eliminating the "need" for taxpayers to fund it. Setting the stage for either privatization or elimination provides long-term benefits as well. If a facility attracts no funding, then it should be eliminated, if it attracts adequate third-party funding, then it can be privatized.

By implementing these reforms, we believe that we can achieve five distinct outcomes.

1. **Rationalize lab size**. Taxpayer funding should focus on activities that meet specific government needs. Presumably this will leave substantial infrastructure as excess. Our reforms will rationalize that infrastructure by identifying what is needed and what can be eliminated or privatized.

2. **Focus taxpayer resources**. Instead of trying to maximize taxpayer funding to sustain potentially outdated or excessive lab infrastructure, Congress can focus funds simply on those activities that advance specific national requirements as lab managers will be free to generate support for excess capacity through third party cooperation.

3. **Efficiently move commercially attractive technology into the market.** By removing barriers to cooperation and creating incentives, we should expect more GPS-like success stories**.**

4. **Yield less government waste and more efficient operations.** Duplicative regulations and an overbearing bureaucracy is costly and quashes the entrepreneurial spirit so critical to any well run organization.

5. **Allow technology to be pulled by markets, not pushed by government.** By focusing the DOE on core government missions and relying on lab managers to develop cooperative efforts with the private sector, our recommendations will rely more on market forces to drive technology transfer rather than political ones.

In conclusion, the nation can benefit from federally-funded research. We see it every day in the realm of national security to give an example. The government gets off track, however, when it attempts to directly intervene in the commercial sector. Like it or not, the federal government is a horrible venture capitalist.

This is not to suggest, however, that government-funded research cannot lead to commercial success. Who doesn't use the internet or a GPS daily?

But it is to suggest that the model for translating government spending into commercial success is not to build a program for the sole purpose of commercialization. The key is to develop a system that ensures that taxpayer research dollars are focused on meeting the nation's research needs, first. Then, encourage interactions with the private sector based on market demand.

Our recommendations do precisely that.

Thank you for your time today. I look forward to answering any questions you may have.

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