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Hearing on
“Oversight and Management of Department of Energy National
Laboratories and Science Activities”

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Chairman Lummis, Ranking Member Swalwell and members of the Committee, I appreciate the opportunity to appear before you today. Congress has an enormous opportunity to turn the National Labs into engines of innovation and growth, with minimal budget impact.

My name is Matthew Stepp. I am a Senior Policy Analyst at the Information Technology and Innovation Foundation (ITIF), where I direct its energy innovation program. From ITIF's point of view, the National Labs are one of the single most important public institutions in the United States innovation enterprise, and can serve as a central tool for boosting job growth, increasing regional economic development, and supporting America's national research goals.

Without a doubt, the labs have produced breakthrough science and technology – everything from leading edge computing, carbon fiber, nano-based building materials, and energy dense batteries, to name a few, have come from lab research. Just like federal investments in research and development writ large, the labs are fundamentally important to America.

However, the Lab system as it is currently organized is falling short of its innovation potential. The principal causes are threefold:

1) Bureaucratic micromanagement muddles the research process by creating an innumerable list of decision-making points from DOE;

2) Incremental funding from Congress slices research funding into small grants by technology, rather than funding long-term research outcomes such as those developed through DOE's Innovation Hubs or ARPA-E;

And 3) the Labs' relationship with industry is often weak, restricting the appreciable economic impact of research and limiting potential industry partners, particularly small businesses.

I'll highlight three broad categories of reform as particularly important:

First, Congress should devolve management of the Labs from centralized DOE control to a purer version of the GOCO model where contractor accountability is the chief method of oversight. Congress should order the creation of a taskforce consisting of lab, DOE, industry, and academic stakeholders to target duplicative regulations that DOE must eliminate or change. One area of potential reform is the extent that site offices are involved in day-to-day lab decision-making. The labs should be able to negotiate with DOE over how extensive site office oversight needs to be, rather than receiving dictation from Washington.

Second, Congress should provide the labs better incentives and more flexibility to partner with industry to spur technology transfer. The current system of agreements is complex and onerous. Congress should amend the Stevenson-Wydler Technology Innovation Act of 1980 to allow the labs to conduct collaborative, non-national security research with third parties without DOE signoff. This more flexible system could be implemented on a pilot basis at first and would still require annual review by DOE, but will greatly accelerate the process of creating industry-lab partnerships.

Third, Congress should begin the important process of reforming the Department of Energy around encouraging innovation, rather than stovepiped basic and applied research programs. The first step would be for Congress to combine the Office of Science with the Office of the Under Secretary for Energy into one streamlined Office of Science and Technology. This would effectively put all non-NNSA Labs under single leadership and offer the ability for better research coordination, more productive funding for lab research and more opportunities for long-term planning.

As the United States faces new and intense competition for global innovation leadership, the Labs system can certainly serve as a national competitive advantage, but only if it is reformed into a more nimble research organization. Doing so requires starting at the top with changes that don't just tinker around the edges but reform the system as a whole.