Testimony of Dr. Peter Littlewood
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before the
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Chairman Weber, Ranking Member Grayson, and members of the Subcommittee, thank you for the opportunity to share with you my thoughts on the findings and recommendations of the Commission to Review the Effectiveness of the National Energy Laboratories.

Let me start by acknowledging the Commission for performing a thorough analysis. Commission members are to be commended for the time and effort they dedicated to examining all 17 national laboratories' missions, capabilities, operations, and challenges.

My fellow lab directors and I are pleased with the Commission's assessment that the laboratories provide great benefit to the country, and that we serve not only the DOE mission but also support the broader science and technology community and help fulfill the security needs of the nation. At the Secretary of Energy's request, we are collectively preparing a detailed response, and we expect to share that in due time. Following much discussion, I believe that my colleagues broadly endorse the major recommendations of the Report. We commit to wholeheartedly engage on our part to work with DOE to make the changes necessary to further increase the value of the national laboratories.

In the testimony that follows, I will give you my perspective as Argonne Director.

The recommendations made by the Commission demonstrate that they heard our feedback and ideas. We are gratified in particular by what I see as a prevailing theme on which I would like to focus my remarks today—the theme of reintroducing acceptable risk-taking into the lab enterprise.

Risk can seem like a negative word, and I would agree that risk is indeed a negative in the realm of safety. But quite frankly, safety is the only area in which I would argue we should never take a risk.

What has developed within the DOE and its laboratories, over time and in response to various events, is increasing attention to detail and attempts to reduce uncertainty. This approach isn't unexpected and not necessarily all bad—wanting to manage risk in a multibillion-dollar institution like DOE isn't unreasonable. But when we are punishing failure rather than rewarding success, we must ask ourselves if we've traded innovation for regulation.

Reinvigorating the government-owned, contractor-operated, or GOCO, model, as recommended by the Commission, essentially helps us hit the reset button. When DOE gives the laboratories and their contractors the authority to operate with more discretion, we are empowered to take the kind of risks that are imperative for scientific discovery and technological innovation. In return, we accept the need for transparency and accountability.

To chart new frontiers, laboratories must take risks in breaking down barriers. We must work across scientific disciplines, between applied and fundamental science, between research institutions, and between funding agencies. This means overlap – sometimes messy. A fear of supporting what might be presented as duplicative research by different agencies, or in different institutions, is now resulting in challenges in building the pipeline from fundamental research to product. The large user facilities of the labs support communities of researchers who lie well outside DOE's own mission space, but just in medicine that intersection has supported in the past such important advances as proton radiotherapy, many major drug developments, the human genome initiative, and the artificial retina.

And just as surely as we must risk failing, we must risk succeeding—and being able to handle the new challenges prompted by that success. Success in science and technology inevitably leads to positive, but often disruptive, change.

Perhaps no other endeavor we undertake at our laboratories better exemplifies the need for accepting risk than the Laboratory Directed Research and Development (LDRD) program. We welcome the Commission's recommendation to restore the cap on LDRD to 6 percent unburdened or equivalent.

Investment in LDRD has paid off. LDRD has enabled virtually every major Argonne initiative, including: the original Advanced Photon Source and its upgrade; the Argonne Leadership Computing Facility; the Joint Center for Energy Storage Research; four Energy Frontier Research Centers; advanced nuclear fuel cycle and reactor modeling/simulation programs; and computational combustion and materials scale-up. LDRD is also peer-reviewed, and extraordinarily competitive.

To conclude, I want to reiterate that I largely support the Commission's report, as it speaks to the ideas and feedback that we shared. The recommendations, when implemented, will help create a working atmosphere to which not only the laboratories, but I believe DOE as well, aspire: an environment where we are empowered to take risks leading to new scientific discoveries in support of critical mission areas for the nation.