Testimony of Samuel T. Walsh
to the
House Committee on Science, Space and Technology
Energy Subcommittee
April 30, 2025

Chairman Weber, Ranking Member Ross, and distinguished members of this subcommittee, my name is Sam Walsh, and I am pleased to share my perspective on the Department of Energy's loan guarantee program – a program that I supported and observed closely during my recent tenure as General Counsel of the Department of Energy from August 2021 to January 2025. I am presently a lawyer in private practice, but today I am testifying solely in my individual capacity.

Our country has cultivated the best environment for technology innovation in the world. Whether you are judging by Nobel Prizes or patent filings, we have a depth of scientific and engineering talent that is unequalled. We have a system of research universities and national laboratories that is second to none. And, we have an entrepreneurial culture that encourages the pursuit of new and disruptive technologies. And yet, we have struggled as a Nation to ensure that when we invent new technologies here, we make them here and deploy them here. Time and again we see technologies invented in the United States that are commercialized and manufactured abroad. This phenomenon is especially apparent in the energy and transportation space, where we have seen China pull into a leading position in the manufacturing and follow-on innovation of solar photovoltaics, batteries (including critical minerals and materials), and now electric vehicles. To compete globally, we need to ensure that American entrepreneurs have every possible tool to commercialize and deploy the new technologies we invent.

We are also facing an energy affordability crisis. Electricity prices are rising and the number of American families unable to pay those bills is growing. In 2022, Congress expanded DOE's loan guarantee authority by adding the Energy Infrastructure Reinvestment (or "1706") program. That program authorizes LPO to provide financing for projects that retool, repower, repurpose, or replace energy infrastructure that has ceased operations. This program achieves two critical objectives. First, it enables utilities to make needed investments with a lower cost of capital, and therefore a lower impact to customer rates. Second, it directs those investments to the areas and communities that have lost jobs and economic activity due to the retirement of energy infrastructure.

The Department of Energy's Loan Guarantee Program is one of the few tools we have to address these challenges. And it is not one we can afford to lose.

Background

The Department of Energy's loan guarantee program was enacted through Title XVII of the Energy Policy Act of 2005.[1] The Energy Policy Act of 2005, which was supported by bipartisan majorities in both houses and signed by President George W. Bush, took an all-of-the-above approach to ensuring that we have affordable, reliable energy in this country. Title XVII was aimed at a financial obstacle sometimes called the "valley of death." The "valley of death" refers to the unique financing challenge facing companies that seek to advance new energy technologies from pilot scale to commercial scale. Banks frequently lack the willingness to provide debt financing for first-of-a-kind projects, especially for projects involving emerging

[1] Public Law No. 109-58.

technologies for which it is difficult to obtain the technical expertise to evaluate and mitigate technology risks.

Title XVII addresses this problem by creating what LPO calls a "bridge to bankability." The statute authorizes LPO to provide loan guarantees for projects that employ new or significantly improved technologies.[2] Successful applicants receive access to debt financing that is patient, customized to the requirements of their project, and comparatively low cost. Over the years, Congress has expanded the scope of LPO's authority to include vehicles and vehicle components under the Advanced Technology Vehicles Manufacturing Loan Program,[3] loan guarantees to tribes and tribal energy development organizations under the Tribal Energy Loan Guarantee Program,[4] and loan guarantees to retool, repower, repurpose, or replace energy infrastructure that has ceased operations under the Energy Infrastructure Reinvestment Program.[5]

Congress established requirements to ensure that these programs provide public benefits while minimizing taxpayer risk. Before the Department can issue a loan or loan guarantee, the law requires the Secretary to determine that there exists a "reasonable prospect of repayment"[6] on the guaranteed obligation. The statute directs the Secretary to conduct a "comprehensive evaluation"[7] as the basis for that determination, which must include a written exchange of analysis with the Department of the Treasury.[8]

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[2] 42 U.S.C. 16513(a)(2).
[3] 42 U.S.C. 17013.
[4] 25 U.S.C. 3502(c).
[5] 42 U.S.C. 16517.
[6] 42 U.S.C. 16512(d)(1)(A).
[7] 42 U.S.C. 16512(d)(1)(B).
[8] 42 U.S.C. 16512(m).

To fulfill these requirements, LPO has built a rigorous review process and a proactive risk management culture. LPO's review process is at least as demanding, and probably more demanding than those of commercial lenders. LPO's process begins with informal meetings with the applicant, followed by the submission of a part I application, which is used to determine eligibility and readiness to proceed. An applicant might then be invited to submit a Part II application, which is more detailed. If LPO finds the Part II application acceptable, the applicant is invited into due diligence. The due diligence process includes a thorough financial, technical, legal and market assessment conducted by LPO staff, by technical experts from other offices of DOE and the national labs, and by external consultants and outside counsel from top firms that are selected by LPO but paid for by the applicant. Through this evaluation, LPO examines the project to identify and mitigate potential risks, while ensuring that the project would meet all statutory requirements, including the reasonable prospect of repayment.

During this phase, LPO and the borrower negotiate a conditional commitment – a term sheet level agreement that sets forth key commercial terms as well as the financial, commercial and technical conditions the borrower will need to satisfy before the parties can close on a final agreement. During this period, LPO also consults with Treasury and the Office of Management and Budget and, ultimately, puts the decision on a conditional commitment to a vote of the Credit Review Board, a body of senior leaders within DOE that are not part of LPO.

After LPO and the prospective borrower have entered a conditional commitment, they set out to negotiate final deal terms and the borrower advances its project to satisfy all outstanding conditions. When LPO and the borrower enter a final agreement, in some cases the borrower will be able to draw on the loan immediately, and in other cases the borrower's right to draw on

the loan may be subject to additional conditions precedent relating to the technical, financial and commercial progress of the project.

LPO's Track Record

The title of this hearing is "Risky Business." But all finance involves risk, especially when it comes to the innovative technologies we will need to maintain global competitiveness in energy and transportation. The question is whether we are taking on smart risks and whether we are getting an adequate return for the risks we take. So, let's look at the record of this program with that in mind. How much financial risk has been imposed on U.S. taxpayers and what have we gotten in return?

LPO is quite transparent regarding the performance of its portfolio. If you go to the LPO website you will see the following figures, current as of the end of last year.[9] The program has issued loan and loan guarantees totaling $69 billion of which $40.5 billion has been disbursed. Actual and estimated losses for the program total $1.03 billion, as compared to $5.6 billion in interest payments that the government has received. This means the program is in the black. In other words, despite the fact that it is extending credit to emerging technologies, and despite the fact that Congress has repeatedly appropriated funds to account for the credit subsidy costs of the loans and loan guarantees as it is required to do under the Federal Credit Reform Act, the program has achieved a positive rate of return for U.S. taxpayers through its portfolio.

On the other side of the ledger, what sort of return have we as a country gotten for our investment? The answer is that the program has empowered dozens of U.S. companies to scale their production and to become leaders in their industries. It has allowed our country to

[9] LPO Website, www.energy.gov/lpo/portfolio.

commercialize a broad range of new technologies. Further, projects funded by LPO have created 47,300 permanent jobs, produced an amount of electricity equivalent to the consumption of 11 million homes, and produced 21.5 million advanced technology vehicles.[10] And, there is ample demand to continue this record of success. As of January, there were 160 projects in LPO's pipeline totaling over $200 billion in total investment.[11] In short, when we look at LPO's track record using actual data, we see a program whose benefits for the American people have vastly exceeded its costs.

New Administration, New Priorities

When new Administrations come into office, new leadership at LPO may choose to emphasize different technology areas. That is to be expected. Secretary Wright has stated a goal to focus on deployment of nuclear energy, geothermal energy, and transmission infrastructure. He has also stated a goal to bolster U.S. manufacturing and to unleash American energy innovation. These are laudable objectives that the DOE loan program can help advance.

I will highlight just one of those technology areas – nuclear energy. As my colleague explains, LPO played an important role in financing the first two new nuclear reactors built in this country in nearly 30 years. That investment helped to build out our nuclear workforce and supply chain, and demonstrated a reactor technology – the AP1000 – that we can now export to our allies. LPO financing is also now supporting the first restart of a retired reactor in our country's history – an investment that has the potential to bring jobs and tax revenues back to the community and to supply needed power to the upper Midwest. And as we look to the future, we see a rich ecosystem of emerging American companies looking to build advanced reactors.

[10] Id.
[11] LPO Website, www.energy.gov/lpo/articles/lpo-year-review-2024.

These new reactors vary in their size, their coolant types, and their fuel types. But as first-of-a-kind projects they will face a common financing challenge. LPO is ideally suited to work with these companies, and indeed, as of last September there was $64.89 billion of advanced nuclear projects in LPO's pipeline (both first of a kind nuclear reactors and infrastructure reinvestment through 1706).[12] With its access to DOE's experts in the Office of Nuclear Energy and at the national labs, LPO can conduct a diligence process that evaluates and mitigates technology risks in a way that no commercial bank could match. And for the projects that make it through the process, LPO can offer the kind of patient and customized debt financing that will set these companies up for success.

What Comes Next for LPO

As I said that the beginning of my testimony, LPO is not a tool that our nation can afford to lose. The risky business we are engaged in now is that we might lose this program and that it will be unavailable either to commercialize the next generation of energy technologies or to help lower electricity bills. And make no mistake, if the program is not supported, we will lose it. There are reports that LPO staff have been encouraged to resign, and that half of the LPO staff have opted to leave so far.[13] This is a program that runs on its people. To issue new loans and to manage its existing portfolio, LPO needs to continue to be funded and it needs to retain its professional staff. At stake are the hundreds of projects in the pipeline that could benefit from this program, tens of billions in domestic investment, tens of thousands of jobs, lower energy

[12] LPO Website, www.energy.gov/lpo/articles/sector-spotlight-advanced-nuclear.
[13] ENERGYWIRE, "Details emerge on surging DOE departures," Christa Marshall & Hannah Northey (April 22, 2025).

bills, and our global competitiveness in advanced technology areas that will be the future of energy production and manufacturing.