

The DOE Loan Program Office's Role in U.S. Nuclear Energy Leadership

The Loan Program Office (LPO) is critical to deploying early-mover nuclear projects at scale. The program's importance was recently highlighted in President Trump's Executive Order (EO) "Reinvigorating the Nuclear Industrial Base." The EO has an ambitious target to have ten new reactors and five GW of nuclear uprates under construction in the U.S. by 2030. The EO directs DOE to utilize the LPO to help meet this target.

To meet the President's target, the LPO lending authority and appropriated funds in both Title 1706 (Energy Infrastructure Reinvestment, EIR) and Title 1703 must be maintained and the lending deadline extended until at least 2030.

LPO loan guarantees provide crucial support for early-stage projects, which accelerate technology commercialization, attract private capital, and ensure U.S. leadership in meeting growing global energy demand. This is achieved with a small amount of appropriations that support a large amount of lending, creating immense value for taxpayers.

Government-backed loans from LPO help finance early movers, bridging the gap between demonstrations and projects that are attractive to private investors. Private-sector lenders view early-stage commercial technologies as high risk, which eliminates many debt financing options. To realize nuclear energy construction by 2030 and beyond, it is imperative to finance these early mover projects now. A financing vehicle for initial commercial deployments that helps bridge the gap between demonstrations and private debt financeable projects is crucial. By investing in early mover projects and supply chain developments, an LPO loan enables reductions in technological and execution risk, making subsequent projects more attractive to private capital markets. The best way to de-risk future projects is to build early ones.

LPO funding enabled the completion of the first advanced light water reactors in the country and is now unlocking new projects. Through loans finalized by the Trump Administration in 2019, the LPO was vital to the first deployment of a new, U.S.-developed reactor at the Vogtle plant in Georgia. The LPO is now facilitating the restart of the retired Palisades reactor in Michigan, the first such project in the country. In addition, planners for completing the VC Summer Plant in South Carolina have expressly stated that the project will not move forward without a loan guarantee from LPO.

LPO loans to nuclear energy projects are of strategic national and energy security importance. China is aggressively investing in nuclear energy and exporting its technology to countries new to nuclear energy, deepening their reliance on China. To compete globally, the U.S. needs to develop a strong domestic nuclear industry and demonstrate reactors at home first. However, private investors are not incentivized to take these interests into account. Strategic early LPO loans help the U.S. compete with foreign state-backed nuclear companies by unlocking capital to complete early mover projects.