# **Advanced Nuclear Energy** Loan Guarantees

#### U.S. DEPARTMENT OF ENERGY LOAN PROGRAMS OFFICE

Under the Title 17 Innovative Energy Loan Guarantee Program, advanced nuclear energy plays an important role in supporting a reliable and resilient grid and promoting economic growth. Continued nuclear energy innovation, such as that seen recently in small modular nuclear reactor technology, strengthens our energy and national security and helps build the next generation of the American nuclear workforce. With \$8.8 billion of available loan guarantee authority, LPO can provide opportunities to finance advanced nuclear power projects.

## **TECHNOLOGY AREAS**

Technology areas of interest include:

- Advanced Nuclear Reactors: State-of-the-art design improvements in fuel technology, thermal efficiency, modularized construction, and safety systems.
- Small Modular Reactors: State-of-the-art design improvements, including but not limited to modularized construction and standardized design, for facilities that are 300 MW or smaller in size.
- Uprates and Upgrades at Existing Facilities: Efficiency improvements to an existing reactor, and critical improvements that are requisite to current or future facility operation.
- Front-End Nuclear: Uranium conversion or enrichment, and/or nuclear fuel fabrication.

#### **ABOUT LPO**

The Department of Energy's Loan Programs Office (LPO) finances large-scale, all-of-the-above energy infrastructure projects in the United States. LPO's in-house team has decades of financial, technical, legal, and environmental experience and works closely with industry to bridge gaps in the commercial debt market when innovative technologies or unfamiliar borrowers may not be well understood by the private sector.

With more than \$40 billion of loans and loan guarantees available, LPO can provide access to debt not typically available in the commercial sector. To date, LPO has approved more than \$30 billion of loans and loan guarantees for more than 30 projects and has a proven track record that includes transforming existing energy infrastructure, reviving nuclear construction, accelerating growth of utility-scale solar and wind, expanding domestic manufacturing of electric vehicles, and improving the lives of all Americans by catalyzing new energy technology and creating jobs.

#### TEAM OF EXPERTS

LPO's in-house team of financial, technical, legal, and environmental experts has the specialized experience with innovative technologies and first-of-a-kind projects that enables LPO to finance projects where other lenders may be deterred. **Over the past decade, LPO financing has helped companies overcome hurdles to obtaining debt for projects that bring technology from demonstration to commercialization.** These deals have included a variety of structures, including corporate loans, project finance, and co-lending, with loan sizes from tens of millions to multi-billions. LPO's loan guarantees have helped catalyze commercial debt providers' entry and expansion into new areas.

### ELIGIBILITY REQUIREMENTS

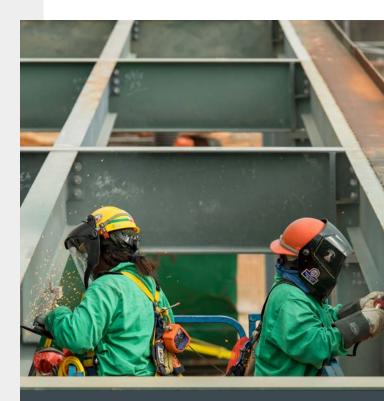
Under this solicitation, a project must meet four requirements to be eligible to be considered for a loan guarantee:

- 1 Innovative Technology
- 2 Greenhouse Gas Benefits
- 3 Located in the United States
- 4 Reasonable Prospect of Repayment

#### STEPS FOR WORKING WITH LPO

- 1 Contact LPO for a no-fee, pre-application consultation
- 2 Submit a Part I application to LPO to determine basic eligibility
- 3 Submit a more thorough Part II application to determine viability
- 4 Enter due diligence and negotiate term sheet
- 6 Receive a conditional commitment offer
- 6 Negotiate and execute loan documents
- LPO monitors construction and operation throughout the life of the loan

The applicant is required to pay various fees and costs during this process, including application fees and additional fees assessed at conditional commitment and closing, as well as DOE's third-party costs, including the fees of DOE's outside advisors.



## CASE STUDY

LPO has guaranteed up to \$12 billion of loans for the construction of two nuclear reactors at the Vogtle nuclear project, the only new nuclear reactor construction to be undertaken in the United States in 30+ years. Vogtle is laying the groundwork for advanced nuclear reactors and a new generation of skilled nuclear workers.

Photos courtesy of Georgia Power Company