

Funding Opportunity: ARPA-E Releases OPEN 2021 FOA

Lewis-Burke Associates LLC – February 12, 2021

On February 11, the Department of Energy (DOE) Advanced Research Projects Agency-Energy (ARPA-E) released a \$100 million Funding Opportunity Announcement (FOA) for its OPEN 2021 program. The OPEN FOA is released once every three years. OPEN 2021 is ARPA-E's fifth OPEN competition with the previous four being held in 2009, 2012, 2015, and 2018. Unlike ARPA-E's standard technology program solicitations, which are narrowly focused on specific topic areas, OPEN 2021 is intentionally broad and offers support for the development of high-risk, transformative energy technologies. The goal of OPEN is to support energy technology development projects that fall outside of ARPA-E's targeted solicitations. In support of the Biden Administration's climate innovation agenda, OPEN 2021 specifically seeks to identify cutting-edge, disruptive clean energy technologies to address the climate crisis. Concept papers are due by **April 6, 2021 at 9:30 AM ET**.

While ARPA-E has allocated \$100 million for the initial funding call, like prior years, ARPA-E is likely to make an additional \$50 million to \$100 million available to fund additional proposals, depending on the number and quality of proposals received. For OPEN 2018, ARPA-E also initially released a \$100 million funding opportunity announcement and selected 45 projects. Following the initial awards, over a six month period, ARPA-E allocated an additional \$100 million to the OPEN program and funded another 32 projects. ARPA-E typically selects additional projects from the concept papers submitted during the call for proposals and does not release another funding opportunity.

Proposals submitted for OPEN 2021 must identify and address at least one of the Technical Categories or Subcategories listed in the full FOA. Despite the breadth of these Categories, there is no guarantee that each will be equally represented among the selected proposals. Rather, the types of projects funded under OPEN 2021 will vary depending on the number and strength of the proposals ARPA-E receives. The categories are intended to cover most major energy-related technologies and address research needs in:

- Grid,
- Transportation,
- Building Efficiency,
- Nuclear and Fossil Power Generation and Energy Production,
- Renewable Power Generation, and
- Bioenergy.

If a proposal does not fit into any of these Categories, applicants are instructed to identify their projects as falling under Category 7 ("Other Energy Technologies"), Subcategory L ("Other Energy Technologies Not Listed Above"). Areas of research related to this FOA include electricity generation (by conventional and renewable means); electricity transmission, storage and distribution; energy efficiency for buildings; manufacturing and commerce; and all aspects of transportation.

In an additional departure from ARPA-E's standard solicitations, which provide specific technical targets within defined focus areas, the agency recognizes that OPEN is too broad for applicants to meet any predefined metrics. As such, applicants to OPEN 2021 are required to effectively measure the potential impact of their proposals against the agency's core missions of "reducing imported energy, reducing energy-related emissions, and improving energy efficiency." While OPEN allows researchers to submit innovative proposals outside of ARPA-E's more limited and targeted program FOAs, it is even more competitive than the targeted funding solicitations. For OPEN 2018, ARPA-E received 2,600 concept papers and selected 77 projects. The rate of success is typically less than 5 percent.

Funding: ARPA-E intends to allocate approximately \$100 million for 30-50 OPEN 2021 awards. Individual award size will range between \$250,000 and \$10 million.

Performance Period: OPEN 2021 awards will be supported up to 36 months. ARPA-E anticipates the start date of OPEN 2021 projects to be March 2022.

Eligibility: Academic institutions, for-profit entities, industry and individuals are eligible to apply for OPEN 2021 funding as standalone applicants or as leads or members of project teams. Federally Funded Research and Development Centers (FFRDCs), including DOE national laboratories, may apply as lead or partner organizations on project teams but not as standalone applicants.

Cost Sharing: Cost-sharing of 20 percent is generally required, but is reduced to 5 percent for educational institutions and consortia made up exclusively of educational institutions. ARPA-E strongly encourages large businesses to provide more than the 20 percent cost share.

Submission Limitations: There is no limit on the number of submissions for each institution and applicants may submit more than one application as long as it is "scientifically distinct."

Important Deadlines:

- First Deadline for Questions (sent to ARPA-E-CO@hq.doe.gov) – **March 26, 2021 at 5:00 PM ET**
- Concept Papers Due – **April 6, 2021 at 9:30 AM ET.**
- Second Deadline for Questions – **TBD**
- Final Applications Due – **TBD**

Sources and Additional Information:

- The full FOA is available at <https://arpa-e-foa.energy.gov/FileContent.aspx?FileID=48ba1b34-5880-4c48-a968-b280a2267a4e>.
- More information about OPEN 2021 can be found at <https://arpa-e.energy.gov/open-2021>.
- Examples of projects funded under OPEN 2018 can be found [here](#).