



## Notice of Funding Opportunity

**Title:** California Flexible Load Research and Deployment Hub  
**Website:** <https://www.energy.ca.gov/solicitations/2020-09/gfo-19-309-california-flexible-load-research-and-deployment-hub>  
**Funding:** Total: \$16,000,000. Maximum awards: \$12M-\$16M, depending on technology.  
**Dates:** Pre-Application Workshop: September 22, 2020  
 Deadline for Written Questions: September 25, 2020  
 Submission Deadline: November 19, 2020

**Summary:** The purpose of this solicitation is to fund a single awardee to establish the California Flexible Load Research and Deployment Hub (CalFlexHub or Hub) to conduct electricity sector applied research and development and technology demonstration and deployment projects that increase the use and market adoption of advanced, interoperable, and flexible demand technologies and strategies as electric grid resources and facilitate integration of distributed energy resources. These Hub projects will increase end-use demand flexibility, reduce dependence on fossil generation for firming renewable resources, enhance grid stability, and take advantage of new electric loads to help resolve reliability issues related to achieving California’s renewable generation and decarbonization goals. Discovering new technologies and strategies and their potential for market adoption and scale up through standards, policy enhancements and regulatory action must be an outcome of the resulting technology research and development.

### Project Topic Areas:

The primary focus of the Hub is on flexible load technology development, advancement, and deployment. The Hub may develop tools and models to facilitate flexible load technology development and deployment, but the focus must be on new and innovative pre-commercial technological solutions. The intention is that the research will result in commercially available technologies. The intent of the Hub is to bring together a multidisciplinary team of leading experts to identify, evaluate, develop and demonstrate the most promising pre-commercial technologies and develop implementation pathways and strategies that advance flexible and grid-integrated energy efficiency and DER technologies. The Hub will use interim research results to refine pilot experiments and demonstration projects over the course of the agreement term to more effectively achieve the research goals.

Each proposal must include a workplan that describes Year 1 research projects in detail and provides a framework with identified criteria for refining and updating the workplan in Years 2-4 based on identified research findings, emerging technology capabilities, state policy goals, and/or other identified factors. The workplan will describe demand flexibility technology projects and strategy pathways in the Technical Approach of the Project Narrative and Scope of Work. The workplan must include information on the proposed spending trajectory that follows the budgets in Table 1 below:

Workplan Years	ARD	TDD	Total
Year 1	\$2.0M (max)	\$2.8M (max)	\$4.8M (max)
Years 2-4 (Total)	\$5.0M	\$6.2M	\$11.2M
Agreement Max Total	\$7.0M	\$9.0M	\$16.0M

Each Applied Research and Development project can occur at one or more sites, but all sites must be located in one or more California IOU service territories. At least one test site must be identified in the application. Additional test sites can be added during the agreement term as other technologies are developed with advance written CEC approval. Each Technology Demonstration and Deployment project must occur at two or more sites and all sites must be located in one or more California IOU service territories. A minimum of two demonstration and deployment sites must be identified in the application. Additional demonstration/deployment sites are expected during the agreement term. Demonstration and deployment sites in DAC and LI communities are encouraged and are eligible for preference points. All project sites must be reviewed and approved by CEC in order to be used for project activities. Research performed by the CalFlexHub in the Applied Research and Development stage should focus on



**MOMENTUM**

925.719.2704



anna@buildmomentum.io



technologies with a current TRL between 3 and 5. Research performed by the CalFlexHub in the Technology Demonstration and Deployment stage should focus on technologies with a current TRL between 6 and 8. The goal is to move these TRLs up by at least two levels by the end of the project.

**Funding:**

There is up to \$16,000,000 available for the grant awarded under this solicitation. The minimum funding amount for the selected project is \$12,000,000. The maximum funding amount is \$16,000,000. Only one grant will be selected for an award under this solicitation. Match funding is required in the amount of at least \$1,800,000 of the requested project funds. To maximize the impact of EPIC projects and to promote the further development and deployment of EPIC-funded technologies, a minimum of 5% of CEC funds requested should go towards technology/knowledge transfer activities.

Project	Available funding	Minimum award amount	Maximum award amount	Minimum match funding
California Flexible Load Research and Deployment Hub	\$16,000,000 (\$7M ARD and \$9M TDD)	\$12,000,000	\$16,000,000	\$1,800,000

**Project Requirements:**

To create a streamlined, incremental, and collaborative approach, the CEC is looking for proposals that identify a comprehensive suite of technology solutions and strategy pathways that address the topics listed above and identify the criteria that will be used to select and evaluate the success of those pathway(s) as research progresses. Proposals are therefore expected to not only lay out a suite of solutions and pathways, but also the selection and evaluation criteria that will be used during the agreement term to select the solutions and pathways that will be further developed by the Hub under the resulting agreement. The successful CalFlexHub awardee will demonstrate strong leadership and a clear vision to develop and deploy advanced technologies that increase grid flexibility affordably so all Californians can take part in helping achieve California’s aggressive carbon reduction goals.

**Eligible Applicants:**

This solicitation is open to all public and private entities with the exception of local publicly owned electric utilities. In accordance with CPUC Decision 12-05-037, funds administered by the CEC may not be used for any purposes associated with local publicly owned electric utility activities.