

**To:** Office of Planning and Research  
 PO Box 3044  
 1400 Tenth Street, Room 113  
 Sacramento, CA 95812-3044

**From:** California Energy Commission  
 1516 Ninth Street, MS-48  
 Sacramento, CA 95814

**Project Applicant:** Regents of University of California, Davis

**Project Title:** Phase Change Material-Enhanced Insulation for Residential Exterior Wall Retrofits - **REVISED**

**Project Location:**

<u>Address</u>	<u>City</u>	<u>County</u>
833 Capitol St	Vallejo 94590	Solano
2536 Dale Ave	Sacramento 95815	Sacramento
3940 Westside Ave	Los Angeles 90008	Los Angeles
215 Sage St Ste 100	Davis 95616	Yolo

**Description of Nature, Purpose and Beneficiaries of Project:**

This project will develop, test, and measure the benefits of a retrofit insulation solution that combines the technical and practical benefits of sealing, blown-in insulation, and phase change materials (PCMs). The best performing PCM-enhanced insulation solution will be field tested in one lab facility and three homes in three different climate zones across California to verify real world achievable natural gas savings and thermal comfort improvement. The benefits of this project, as related to the California Investor-Owned Utility natural gas ratepayers, are to increase grid resiliency, reduce financial burden for natural gas services, and improved safety by reducing greenhouse gas emissions.

**Name of Public Agency Approving Project:** California Energy Commission

**Name of Person or Agency Carrying Out Project:** Regents University of California, Davis

**Exempt Status:** *(check one)*

- Ministerial Exemption (Pub. Resources Code § 21080(b)(1); Cal. Code Regs., tit. 14, § 15268);
- Declared Emergency (Pub. Resources Code § 21080(b)(3); Cal. Code Regs., tit. 14, § 15269(a));
- Emergency Project (Pub. Resources Code § 21080(b)(4); Cal. Code Regs., tit. 14, § 15269(b)(c));
- Categorical Exemption. State type and section number  
Cal. Code Regs., tit. 14, §15301, §15306
- Statutory Exemptions. State code number.
- Common Sense Exemption. (Cal. Code Regs., tit 14, §15061(b)(3))

**Reasons why project is exempt:**

Cal. Code Regs., Title 14, section 15301 This project consists of the operation, repair, maintenance, or minor alteration of existing private structures, facilities, or mechanical equipment, and involves negligible or no expansion of use beyond that existing. Specifically, the project will involve two phases. First, insulation solutions will be developed and laboratory-tested at an existing 2,000-square-foot laboratory facility on the UC Davis campus, using equipment which already exists in the laboratory. Second, insulation solutions will be installed in three existing single-family homes in Vallejo, Sacramento, and Los Angeles. The three single-family homes (807, 1110 1769, and 1500 sq. ft.) will have their exterior walls retrofitted to seal and insulate the wall cavities with loose-fill insulation. Phase change material will be added either to the insulation material or applied to the interior wall surface. The interior walls will be repaired/painted.

Authority cited: Sections 21083 and 21110, Public Resources Code. Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

The project will not involve expansion of existing use or capacity and will not have a significant effect on the environment, and therefore falls within section 15301.

Cal. Code Regs., Title 14, section 15306 The purpose of installing insulation solutions in private homes is to monitor and analyze the thermal performance and electricity consumption of the homes' HVAC and the efficiency of the insulation solutions. The project is strictly for information gathering purposes and involves basic data collection with no serious or major disturbance to an environmental resource. Therefore, the project falls within section 15306.

**Responsible Agency**

**Contact Person:** Abigail Jacob **Area code/Telephone/Ext:** 916-327-1314

**If filed by applicant:**

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?  Yes  No

**Signature:** Abigail Jacob **Date:** 6/29/2020 **Title:** Associate Energy Specialist

Governor's Office of Planning & Research

**Jun 29 2020**

**Signed by Responsible Agency**

**Signed by Lead Agency**

**Signed by Applicant**

**Date received for filing at OPR:** STATE CLEARINGHOUSE