

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

**From:** California Energy Commission  
 715 P Street  
 Sacramento, CA 95814

**Project Applicant:** Prospect Silicon Valley

**Project Title:** Advanced R744 Heat Pump for simultaneous heating and cooling with advanced energy optimization and defrost strategies.

**Project Location – Specific:** 1 Cyclotron Rd Bldg 90R3111

**Project Location – City:** Berkeley 94720      **Project Location – County:** Alameda

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

ProspectSV, Flow Environmental Systems, DMG North, and Lawrence Berkeley National Laboratory (LBNL) are partnering to demonstrate an advanced, cost-competitive, high-efficiency large air-source and water-source heat pump using ultra-low GWP refrigerant. This project aims to evaluate the performance of the heat pump in replacing gas-fueled heating and water heating appliances while reducing initial costs through innovative modular design. Additionally, it seeks to advance efficient and dynamic operations of heat pump systems in large commercial buildings, providing simultaneous heating, cooling, and domestic hot water.

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

**Name of Person or Agency Carrying Out Project:** Prospect Silicon Valley

**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 ; Cal. Code Regs., tit. 14, § 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 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public and private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of use beyond that existing at the time of the lead agency's determination, are categorically exempt from the provisions of the California Environmental Quality Act.

The proposed project will primarily test and modify existing equipment within existing laboratories, in conjunction with research and paper-based studies. The laboratory-based work will take place in existing facilities at the Lawrence Berkley National Labs FLEXLab. For these reasons, the proposed work will not have any significant effect on the environment and is exempt under Cal. Code Regs., tit 14, Section 15301.

Cal. Code Regs., tit. 14 Section 15306 provides that projects which consist of basic data collection, research, experimental management, and resource evaluation activities, and which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of the California Environmental Quality Act. The research is described above. There are no sensitive environmental resources at the laboratory site. For these reasons, the proposed work will not have any significant effect on the environment and is exempt under Cal. Code Regs., tit 14, Section 15306,

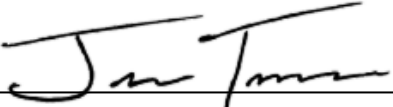
The project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

**Lead Agency**

**Contact Person:** Jason Tancher **Area code/Telephone/Ext:** 916-776-0693

**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:**  **Date:** 5/22/2024 **Title:** Utility Engineer

**Signed by Responsible Agency**

**Signed by Lead Agency**

**Signed by Applicant**

**Date received for filing at OPR:** \_\_\_\_\_