

**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:** Electric Power Research Institute, Inc.

**Project Title:** A zero GWP heat pump and distribution system for all-electric heating and cooling in California

**Project Location:**

Address	City	County
10111 Riverford Rd	Lakeside 92040	San Diego
4760 Clairemont Mesa Blvd	San Diego 92117	San Diego
200 Maritime Academy Dr	Vallejo 94590	Solano
Potential TBD	TBD	TBD

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

This project will optimize, test and demonstrate a reversible heat pump system that uses near-zero global warming potential (GWP) refrigerants, such as ammonia (NH3) and carbon dioxide (CO2), for multi-family (MF) or small commercial (SMC) applications. These heat pumps will be in the range of 10 to 20 tons of refrigerating capacity. This new heat pump system will increase cost savings derived from reduced piping installations costs. Additional cost savings and emissions reductions result from lower energy requirements due to higher system efficiency.

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

**Name of Person or Agency Carrying Out Project:** Electric Power Research Institute, Inc.

**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, § 15303
- Statutory Exemptions. State code number.
- Common Sense Exemption. (Cal. Code Regs., tit 14, §15061(b)(3))

**Reasons why project is exempt:**

This project is exempt under the Categorical Exemption. Cal. Code Regs., tit 14, 15303 New Construction or Conversion of Small Structures which exempts limited numbers of new, small facilities or structures and installation of small new equipment and facilities in small structures. EPRI is developing, testing, and demonstrating low global warming potential heat pump and distribution systems that will involve installation of small new equipment at existing multifamily and/or small commercial facilities that will not result in serious or major disturbance to an environmental resource.

Authority cited: Sections 21083 and 21110, Public Resources Code. Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.  
 Electric Power Research Institute, Inc.

**Lead Agency**

**Contact Person:** Matthew Fung **Area code/Telephone/Ext:** 916-327-1422

**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:** Matthew Fung **Date:** 6/8/2020 **Title:** Mechanical Engineer

Governor's Office of Planning & Research

**Jun 08 2020**

**STATE CLEARINGHOUSE**

- Signed by Responsible Agency
- Signed by Lead Agency
- Signed by Applicant

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