

**Notice of Exemption****Form D**

**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:** Institute of Gas Technology dba Gas Technology Institute

**Project Title:** Demonstration of 4.5 and 25 kW CARB-compliant Reciprocating Engine Micro-CHP Systems-REVISED

**Project Location:**

Address	City	County
9240 Firestone Blvd	Downey 90241	Los Angeles
16003 Turtleback Rd	San Diego 92127	San Diego

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

The purpose of this project is to develop and demonstrate two high efficiency, near-zero NOx emission, micro-scale combined heat and power systems. The systems, sized at 4.5 kW and 25 kW, will first undergo laboratory testing in order to verify compliance with California Air Resources Board (CARB) Distributed Generation (DG) emissions standards and obtain CARB DG certification. The 4.5 kW and 25 kW systems will then be demonstrated at a commercial building and recreation center, respectively, in order to generate real-world operational data.

**Name of Public Agency Approving Project:**California Energy Commission**Name of Person or Agency Carrying Out Project:**Institute of Gas Technology dba Gas Technology Institute**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, § 15303; 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:**

The project will develop and demonstrate two high efficiency CHP systems. The smaller, 4.5 kW system will be demonstrated at a commercial building while the larger, 25 kW system, will be demonstrated at a recreation center.

The CHP systems consist of a natural gas-fueled distributed generator, exhaust heat recovery system, hot water storage tank, and hot water distribution system. The materials used to construct the CHP systems are chemically inert, not hazardous to human health, and do not have a significant effect on the environment. The CHP systems will undergo safety testing prior to installation at the demonstration sites to ensure compliance with relevant environmental codes and standards. In addition, the local air district will be notified and appropriate air permits

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

will be obtained prior to system demonstration. The demonstrations will not have a significant impact on local air quality, noise, or traffic. For these reasons, the project will not have a significant effect on the environment and falls under the categorical exemption listed in 14 C.C.R. §15301.

In order to perform the demonstration the CHP systems must be installed at their respective demonstration sites. The installations will require minimal construction activity. The equipment may be placed directly on the ground, or it possible that a small concrete pad will be poured. This minimal construction is well within the size limits listed in the examples given in 14 C.C.R. § 15303 (e.g., it is less than a single-family residence, duplex, and the 2,500 square feet - or 10,000 square feet in urban areas - for a store, motel, office, restaurant, or similar structure). This construction will not have a significant impact on local air quality, noise, or traffic and will not induce additional operations at the site. For these reasons, the project will not have a significant effect on the environment and falls under the categorical exemption listed in 14 C.C.R. § 15303.

The work at the demonstration sites will involve basic data collection, research, and analysis to determine the performance of the systems. This work includes computer modeling to estimate the energy balance of the systems and the economic impacts if the systems are widely adopted in California. For these reasons, the project will not have a significant effect on the environment and falls under the categorical exemption listed in 14 C.C.R. §15306.

**Lead Agency**

**Contact Person:** Chuck Gentry **Area code/Telephone/Ext:** 916-327-1528

**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:** Chuck Gentry **Date:** 2/4/20 **Title:** Mechanical Engineer

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

Governor's Office of Planning & Research

**Date received for filing at OPR:** FEB 11 2020

**STATE CLEARINGHOUSE**