

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: Center for Transportation and the Environment, Inc.

Project Title: Hydrogen Back-Up Generation Vehicle (H2BUG)

Project Location:

<u>Address</u>	<u>City</u>	<u>County</u>
1181 Cadillac Ct (Cummins)	Milpitas 95035	Santa Clara
1547 E Grant Line Rd (FEMA test site)	Tracy 95304	San Joaquin
330 Industrial Blvd (Cummins)	West Sacramento 95691	Yolo
650 Alpine Way (SDG&E test site)	Escondido 92029	San Diego
155 S G St (SoCalGas test site)	San Bernardino 92410	San Bernardino
26431 Pine Ave (SoCalGas test site)	Rimforest 92378	San Bernardino
24650 Ave Rockefeller (SoCalGas test site)	Santa Clarita 91355	Los Angeles

Description of Nature, Purpose and Beneficiaries of Project:

Under grant agreement EPC-21-011, the California Energy Commission (CEC) will provide a grant of \$3,000,000 grant to the Center for Transportation and Environment, Inc. to design, build, test, and demonstrate a zero-emission hydrogen fuel cell mobile backup generation vehicle (H2BUG), leveraging existing transportation mediums without compromising equipment performance. The H2BUG vehicles will be designed based on an emergency disaster relief vehicle that will be developed under a grant from the U.S. Department of Energy and U.S. Department of Defense’s H2Rescue program. As opposed to mobile diesel generators which are only used to provide power, need to be towed to an emergency or disaster relief site and need frequent refueling, H2BUG is a fully self-contained system that can drive to/from an emergency or disaster relief site, provide exportable power, supply up to 10 gallons of water and serve as an incident command vehicle. It is also fully self-sufficient as it brings its own fuel on-board.

The goal of the H2BUG project is to be able to drive over 90 miles each way to emergency and disaster relief locations and provide at least 35 kW of continuous power for a minimum of 48 hours. To generate exportable electricity, H2BUG uses the PEM fuel cell in the truck powertrain and a large on-board DC to AC inverter making it a truly mobile system. In addition, it uses a high-capacity 700 bar hydrogen tank system allowing the proposed energy level and duration without needing additional hydrogen tanks. H2BUG can also utilize available green electrolytic hydrogen as a fuel source.

Beneficiaries will include investor-owned utility ratepayers and the public in general at disaster sites. Ratepayer benefits include greater electricity reliability and increased safety by developing and demonstrating a zero-emission emergency response vehicle that is capable of power export like that of a diesel generator. The vehicle also features an emergency response cabin that can accommodate similar utility as an incident command vehicle typically used by federal, state, and local agencies.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: Center for Transportation and the Environment, Inc.

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

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:

This project involves the demonstration and testing of two mobile energy storage systems (H2BUGs). Each H2BUG will have a hydrogen fuel cell that powers the truck and also exports power to facilities or buildings. During system testing, the H2BUGs will drive to the project sites, park on existing ground, and connect to the site's electrical services downstream of the meter. The H2BUG system is for temporary use at a site, such as emergencies, and will not be permanent. Safety precautions related to high-pressure hydrogen storage and high-voltage vehicle systems will be used in design and operation.

Design, assembly, and initial testing of the H2BUG prototype will occur at existing laboratory and manufacturing facilities of Cummins, Inc. in Milpitas, California. H2BUG prototype will also be tested at existing facility of Federal Emergency Management Agency in Tracy, California. Assembly, initial testing, and demonstration of the H2BUGs will occur at existing laboratory and manufacturing facilities of Cummins, Inc. in West Sacramento, California. Electrical testing of H2BUG will be conducted at existing facility of San Diego Gas & Electric Company in Escondido, California. Demonstration test sites will be at existing facilities of Southern California Gas Company. Minor electrical connection upgrades may be needed at the test sites. Vehicle trips will be minimal. This project is therefore categorically exempt from environmental review under section 15301 of the CEQA Guidelines, because it consists of operation, maintenance, or minor alteration of existing public and private structures, facilities, mechanical equipment, or topographical features, and because it involves negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

The project is also categorically exempt under section 15306 of the CEQA Guidelines, because it consists of basic data collection, research, experimental management, and resource evaluation activities which will not result in a serious or major disturbance to an environmental resource.

Lead Agency

Contact Person: Hatice Gecol **Area code/Telephone/Ext:** 916-776-0688

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: Hatice Gecol **Date:** 5/9/2022 **Title:** _____

Signed by Responsible Agency

Signed by Lead Agency

Signed by Applicant

Date received for filing at OPR: _____