

**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, MS-48  
 Sacramento, CA 95814

**Project Applicant:** DasH2energy LLC  
**Project Title:** Demand Based Renewable Hydrogen Power-to-Power Project  
**Project Location – Specific:** Engineering Laboratory Facility, Building #343, University of California, Irvine Campus  
**Project Location – City:** Irvine **Project Location – County:** Orange

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

Under grant Agreement EPC-19-037, the California Energy Commission will provide a grant of \$1,275,475 to DasH2energy LLC to establish a renewable hydrogen energy storage system. The project focuses on creating an electricity in/electricity out system by integrating electrolysis, high-pressure hydrogen storage and fuel cell electrical regeneration, with the existing microgrid and control systems at UC Irvine. The hydrogen system will be supplied with electricity from onsite photo-voltaic solar generation and will store the energy as hydrogen to be converted back to electricity to simulate cost savings and long duration resiliency for a municipal water treatment plant in Palmdale.

Goals include: The project will validate the hydrogen system's ability to: provide customer energy cost savings and price stability; resiliency during Public Safety Power Shutoff events; load follow; provide baseload renewables; and provide long duration storage of large amounts of power. The data obtained on capital cost, operating cost, performance, and lessons learned will support future commercial deployment.

Beneficiaries will include the Palmdale Water District Public Facilities Corporation and its water treatment plant, the District's water ratepayers, UC Irvine, California's investor-owned electric utilities and their customers (i.e., ratepayers); the recipient along with the public at large and the environment.

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

**Name of Person or Agency Carrying Out Project:** DasH2energy LLC

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

**Reasons why project is exempt:**

The project involves the design, installation, commissioning, and evaluation of a containerized fuel cell system that includes electrolysis; high-pressure, gaseous hydrogen storage; and integration with a microgrid. The design and evaluation work will mostly take place in the existing offices of the recipient and subcontractors. Regarding installation and commissioning: a 60kW alkaline electrolyzer; 100kW fuel cell; hydrogen storage tanks and

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

associated balance of plant equipment will be deployed within the UC Irvine microgrid. The hydrogen systems will be installed in the same location as a recently decommissioned hydrogen system and will utilize where practical the existing services and connections already onsite. Electrical and water connections will be made. Fire and explosion safety precautions will be taken regarding gaseous hydrogen storage and other project components.

The project consists of the operation, repair, maintenance, permitting, and minor alteration of operation of these existing the existing UC Irvine microgrid and engineering facilities, involving negligible or no expansion of existing or former use. Therefore, this project is exempt under California Code of Regulations, title 14, section 15301, Existing Facilities.

Lead Agency actions: The recipient originally planned to deploy the hydrogen system at Palmdale. Under amendment #1 the recipient's revised project implementation plan will deploy at UC Irvine. The Palmdale Water District would have been the Lead Agency under CEQA for the pilot test site at its water treatment plant. On May 12, 2020, the Palmdale Water District filed a Notice of Exemption for its portion of the project, based on California Code of Regulations, title 14, section 15301, Existing Facilities. However, because the deployment in Palmdale became infeasible, the project site was moved to a lab at UC Irvine. On October 28, 2021, the University of California, the lead Agency under CEQA for its portion of the project, determined on its University of California Environmental Impact Classification internal form, that deployment of the hydrogen system within existing facilities on its campus is exempt under California Code of Regulations, title 14, sections 15301, Existing Facilities, and 15306, Information Collection.

**Lead Agency**

**Contact Person:** Robin Goodhand **Area code/Telephone/Ext:** 916-776-0766

**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:** April 07, 2022 **Title:** EGSS-I

**Signed by Responsible Agency**

**Signed by Lead Agency**

**Signed by Applicant**

**Date received for filing at OPR:** April 07, 2022