

**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:** Paulsson, Inc.

**Project Title:** All Optical Multi-Sensor Well Monitoring System to Secure Gas Storage Operations

**Project Location – Specific:** PG&E McDonald Island 2121 N Zuckerman Rd.

**Project Location – City:** Stockton 95219      **Project Location – County:** San Joaquin

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

This project will develop, in a laboratory, and demonstrate, at an existing natural gas storage facility, a downhole multi-sensor array based on fiber optic sensing technologies to monitor natural gas storage reservoirs. This multi-sensor array will include all-optical pressure, acoustic, strain and temperature sensors to provide real-time monitoring. The purpose of this project is to detect pre-failure micro-seismic noise, excessive strain, and any small leaks. The beneficiaries of this project include

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

**Name of Person or Agency Carrying Out Project:** Paulsson, 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, § 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:**

California. Code Regs., tit 14, section 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of existing or former use, are categorically exempt from the provisions of the California Environmental Quality Act. This project will consist of laboratory testing and field testing of fiber optic sensors to monitor natural gas storage reservoirs. The laboratory testing will be conducted in an existing laboratory, using existing equipment in the laboratory. The field testing will be conducted at an existing borehole at an existing PG&E's natural gas storage facility, where the fiber optic sensors will be placed inside a 2 3/8” tube within the 5,300-foot-deep borehole. In addition, a 160 square-foot, partially air-conditioned instrument storage container will be placed next to the wellhead. These modifications will not result in expanding the capacity or use of the facility.

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

This project is also exempt under California Code Regs., tit 14, section 15306 which provides that projects which consist of basic data collection, research, experimental management, and resource evaluation activities 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. This project will collect data within the natural gas storage well in real-time, for approximately 6 months. The fiber optic sensors include pressure, acoustic, distributed strain, and distributed pressure sensors. They will detect pre-failure micro-seismic noise, excessive strain, and any small leaks. The instruments will be accessed remotely to obtain the data recorded. These activities will not result in a serious or major disturbance to an environmental resource.

For these reasons, the proposed work will not have any significant effect on the environment and falls under sections 15301 and 15306.

**Responsible Agency**

**Contact Person:** Reta Ortiz **Area code/Telephone/Ext:** 916-327-1494

**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:** *Reta Ortiz* **Date:** 06/17/2020 **Title:** ECS I

Governor’s Office of Planning & Research

**Signed by Responsible Agency**

**Signed by Lead Agency**

**Signed by Applicant**

**Jun 18 2020**

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

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