

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
Sacramento, CA 95814

Project Applicant: Institute of Gas Technology dba GTI Energy

Project Title: Plastic Pipeline Deficiency Inspection for Pipeline Integrity Management

Project Location – Specific: Various locations in southern and central California

Project Location – City: Various **Project Location – County:** Los Angeles, San Bernardino, Kern, and Riverside Counties

Description of Nature, Purpose and Beneficiaries of Project:

The project will focus on extensive testing of a relatively mature Non-Destructive Evaluation (NDE) Phased Array Ultrasonic Testing (PAUT) tool, capable of identifying cracks in the wall of pipes and defects in fusion joints. Both fieldwork and extensive laboratory testing will be conducted to verify inspection results and accelerated lifetime testing of the pipe assemblies where indications of defects were found. The primary objective of this effort is to demonstrate the probability of detection of different categories of anomalies in plastic pipe assemblies when using PAUT tools. The secondary objective is to develop a correlation of indications found to the expected residual lifetime of the asset given the indication of defect. The tertiary objective is to integrate the information provided by the NDE inspections into the risk assessment models. These risk assessment models will fuse multiple sources of information pertaining to the integrity of the pipeline system being evaluated. This approach will allow the development of comparative metrics to compare risk profiles developed without NDE information to those developed with NDE information. The risk assessment information will be incorporated into a holistic integrity management decision support framework culminating in RSE and for benefits to stakeholder metrics. These metrics will allow comparison of impact to integrity management and stakeholder objectives with, and without NDE information.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: GTI Energy

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:

Authority cited: Sections 21083 and 21110, Public Resources Code. Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.
Institute of Gas Technology dba GTI Energy

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. The project will assess a PAUT tool to inspect both plastic pipe and fusion joints. During the initial laboratory testing period of the proposed project, pipe assemblies will be removed from the field within an investor-owned utility's (IOU) service territory during normal operations from an area associated with third-party damage hits on the plastic pipeline infrastructure. During the second portion of the proposed project, field demonstration sites will be selected from fully random sampling locations, also within an IOUs service territory, for field trials of the NDE equipment. These activities will result in negligible or no expansion of existing or former use of this existing infrastructure.

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 in a laboratory setting using samples from the field that have experienced third party hits, and by testing the NDE technology through field demonstrations at fully random sites, all located at sites within an IOU's service territory. The project will also address the interpretation of indications of defects identified by PAUT, incorporation of NDE inspection data into probabilistic risk assessment models, and development of probabilistic assessments of the impact of NDE inspection data on risk spend efficiency metrics in pipeline integrity management programs. The holistic approach adopted in the proposed project will provide a comprehensive view of the efficacy of PAUT in detecting defects in plastic piping systems, and the impact this new information has when viewed through the lens of benefits to stakeholders. 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 the exemptions in sections 15301 and 15306.


This project does not involve impacts on any particularly sensitive environment; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project and this project will not have a significant effect on the environment.

Lead Agency

Contact Person: Sean Anayah **Area code/Telephone/Ext:** (916) 931-5044

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:** 8/30/2023 **Title:** Energy Commission Specialist I

Signed by Responsible Agency

Signed by Lead Agency

Signed by Applicant

Date received for filing at OPR: _____