

## PUBLIC UTILITIES COMMISSION

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SAN FRANCISCO, CA 94102-3298



October 31, 2016

GI-2016-02-SCE70-04

Mr. Greg Ferree (Greg.Ferree@sce.com)  
Vice President, Distribution Business Line  
Southern California Edison  
3 Innovation Way  
Pomona, CA 91768

SUBJECT: General Order 112 Inspection of Southern California Edison, Catalina Island's  
Emergency Management Program

Dear Mr. Ferree:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission, Maria Solis and Alin Podoreanu conducted a General Order 112 and CA Public Utilities Code Sections 950, 955, 956, 956.5 inspection of Southern California Edison (SCE) from February 16 through 18, 2016.<sup>1</sup> The inspection included a review of Emergency Management procedures and records for calendar year 2015.

A Summary of Inspection Findings (Summary), which contains areas of concerns and recommendations identified by SED staff, is included as an attachment to this letter.

Please provide a written response indicating the measures taken by SCE to address the areas of concerns and recommendations within 30 days from the date of this letter. SED looks forward to the future success of the Catalina District personnel as they implement their Emergency Response Plan to minimize the potential hazards resulting from a gas pipeline emergency. The recommendations provided will ensure prompt and effective response and recovery to emergencies.

If you have any questions, please contact Alin Podoreanu at (916) 928-2552 or by email at [alin.podoreanu@cpuc.ca.gov](mailto:alin.podoreanu@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads 'Kenneth A. Bruno'.

Kenneth Bruno  
Program Manager - CPUC  
Safety and Enforcement Division

cc: Rob Grimm, P.E. – SCE ([Rob.Grimm@sce.com](mailto:Rob.Grimm@sce.com))  
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<sup>1</sup> General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

## **SUMMARY OF INSPECTION FINDINGS**

### **A. Areas of Concern and Recommendations**

1. Title 49, Code of Federal Regulations (CFR) §192.605 Procedural manual for operations, maintenance, and emergencies states:

*“(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.”*

SED reviewed the screen shots of the Adjusted Maintenance Plan for Standard Procedure (SP) 406 that includes annual training requirements for 14 individuals on the Emergency Response Plan (Emergency Response Plan) for the Catalina Petroleum Gas Pipeline Distribution System (Attachment A is the Community Gas Emergency Plan); Training Procedure (TP) 405 that includes emergency response to petroleum gas incidents; and SP 400 that describes minimum requirements for developing Gas Operations and Maintenance Procedures Manual for SCE Catalina District Petroleum Gas Pipeline Distribution System.

SP 400 includes procedures that comply with 49 CFR §192.605 (a) to prepare an emergency plan, to review and update at intervals not exceeding 15 months, but at least once each calendar year, and to keep appropriate parts of the manual at locations where operations and maintenance activities are conducted. Locations of the Emergency Response Plan within the Catalina District were verified during the audit as the follows: Control Room, Catalina District offices, and 5 Fleet Vehicles.

In addition, all standard procedures, training procedures, Emergency Response Plan, Safety Plan, and Incident Management Programs need to be revised to reference the June 25, 2015 General Order 112-F instead of General Order 112-E.

2. Title 49 CFR §192.615 (a) states:

*“Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:*

*(a)(1) Receiving, identifying, and classifying notices of events which require immediate response by the operator.”*

SED reviewed the November 2015, Emergency Response Plan for the Catalina Petroleum Gas Pipeline Distribution System, Section titled “Receiving, Classifying, and Responding to Gas Incidents.” Based on collaboration during the audit SCE has revised their Emergency Response Plan, dated February 2016 to include a more detailed Section 2.3 labeled

“Receiving, Classifying, and Responding to Gas Incidents,” that better demonstrates compliance with Title 49 CFR §192.615(a)(1).

The revised section includes two different avenues that notifications of potential gas emergencies may be received by the Catalina Utilities Center which are in turn dispatched to the control room. In addition, SCE updated their telephonic leak report form that is used initially to receive and identify notices. SCE also conducted training of their control room operators on 2/18/16 for Propane Gas Leak Telephone Report and Response.

SED also reviewed SP 406 that outlines the requirements in order to minimize a hazard resulting from a gas pipeline emergency; TP 405, Section 4.1, titled Review Policy and Procedures of Notifying, Reporting and Responding to a Propane Release; and SP 405, titled Notifying, Reporting, and Responding .

Section 2.3 of the Emergency Response Plan also states that control room personnel is “periodically” trained by their supervisor on receiving, classifying, and responding to reports of propane gas leaks or other unsafe conditions. SED reviewed screen shots of the Adjusted Maintenance Plan for SP 406, which includes “annual” training requirements for 14 individuals who receiving, identifying, and classifying notices of events which require immediate response by the operator.

The Emergency Response Plan and TP 405 includes procedures that comply with 49 CFR §192.615 (a)(1). However, Section 2.3 of the Emergency Response Plan should be revised to include “annual” training instead of stating “periodically” trained by their supervisor.

In addition, during the audit Catalina District personnel agreed to coordinate with SCE Marketing Project Manager – Residential, Offer Management & Marketing Department and the SCE Digital Content Team to add the following to the SCE main webpage <https://www.sce.com/wps/portal/home> specifically for the Catalina District:

- Add a link to Catalina Webpage to the SCE.com homepage for easier access for customers. SED verified this was completed on 9/15/16.
- Add a Gas Safety Brochure link to the Catalina Website, Gas Safety Brochure is being updated to match the revised Propane Gas Leak Telephone Report and Response
- Provide Gas Safety Information on the Website for First Responders.
- Add Catalina District to the Outage Maintenance System for reporting outages. SED verified this was completed on 9/14/16.

*“(a)(2) Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.”*

SED reviewed the SCE Incident Management Program, Version 2.0, February 8, 2016. The Incident Management Program includes a standardized incident management structure that allows for better integration with the public sector when SCE is responding to a gas incident that includes Local, State, and Federal public agencies. All Catalina District employees are

trained on the Incident Command System (ICS) which enables a coordinated response among jurisdictions and functional agencies, both public and private during an emergency. Using the ICS allows SCE to establish and maintain adequate means of communication with appropriate fire, police, and other public officials.

In addition, SCE's Telephone Report of Customer Leak form and Section 2.5 of the Emergency Response Plan directs the Catalina Utilities Center and Control Room personnel to call 911 to access emergency response services and Section 2.6 includes a Catalina Emergency Contact List of public agencies including first responders.

Finally, the revised Emergency Response Plan, Section 2.20 includes a reporting contact phone number for the LA County Fire Certified Unified Program Agency (CUPA).

The Emergency Response Plan includes procedures that comply with 49 CFR §192.615 (a)(2).

*“(a)(3) Prompt and effective response to a notice of each type of emergency, including the following:*

- (i) Gas detected inside or near a building.*
- (ii) Fire located near or directly involving a pipeline facility.*
- (iii) Explosion occurring near or directly involving a pipeline facility.*
- (iv) Natural disaster.”*

SED reviewed the Emergency Response Plan and the SCE Incident Management Program. Both Plans include 4 levels of incidents and a table that includes Recommended Incident Level Activation along with a check list labeled Incident Complexity Analysis. In addition, the Emergency Response Plan includes a Checklist for Major Emergencies.

The Emergency Response Plan Section 2.9 includes a table of Response Procedures that includes Conditions, Immediate Actions, and Risk Management procedures for Catalina District personnel. There are 12 potential types of emergency “Conditions” described in Section 2.9.

The Emergency Response Plan includes procedures that comply with 49 CFR §192.615 (a)(3).

*“(a)(4) The availability of personnel, equipment, tools, and materials, as needed at the scene of an emergency.”*

The revised February 2016, Emergency Response Plan, Section 2.16 includes a revised inventory of tools and equipment for each vehicle, warehouse, and offsite storage facility. The revised plan also includes a list of all wrench sizes for all gas valve locations. In addition, Section 2.16 includes a new table that lists all the Trained Response Staff for field and administrative duties during an emergency.

While SED verified the emergency equipment, tools, and materials stored on vehicles and within the Catalina District warehouse, SED noted that maintenance personnel were not confident operating the Heath\_FI Unit (Heath Detecto-Pak 4, Flame Ionization Hydrocarbon Detector) on their own. Since the audit a new job aid was created with detailed operating procedures for the Heath\_FI Unit for the Catalina District personnel.

The Emergency Response Plan, Section 2.17, Mutual Assistance also includes two mutual assistance agreements that can be used to provide resources during and after an emergency if additional trained personnel, equipment, tools, and materials are needed.

Since the audit and based on collaboration during the audit the Catalina District personnel has partnered with the City of Avalon Department of Public Works to establish an emergency services Purchase Order, outlining the resources and equipment which may be utilized when responding to emergencies. The partnership will allow for prompt mobilization of equipment and resources during gas emergencies while providing guidelines to account for costs associated with the response activities.

The Emergency Response Plan, Section 2.18, discusses the need to hire qualified general pipeline contractors to reconstruct broken gas mains if major gas ruptures occur that could lead to extended service interruptions. Section 2.18 states that there are currently no existing emergency response contracts with qualified contractors.

SED acknowledges that SCE has hired additional personnel since 2014 including an on-site contractor to ensure that the Catalina District personnel have the resources to successfully implement the Emergency Response Plan and associated standard procedures, training procedures, and first responder liaison activities.

The Emergency Response Plan includes procedures that comply with 49 CFR §192.615 (a)(4). However, the Catalina District personnel should document in Section 2.18 of the Emergency Response Plan what contracts SCE already has in place with qualified providers that can improve the recovery efforts during catastrophic events on Catalina Island. In addition, all propane gas distribution maps shall be updated in all 8 vehicles that may be used during response to an emergency incident.

*“(a)(5) Actions directed toward protecting people first and then property.”*

SED reviewed the Emergency Response Plan and the SCE Incident Management Plan and has determined that both plans include procedures that comply with 49 CFR §192.615 (a)(5).

*“(a)(6) Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.”*

SED reviewed the revised Appendix D Emergency Shutdown and Restoration Procedure of Catalina District Petroleum Gas Pipeline, SP 406, Attachment B, which describes emergency shutdown procedures for emergency events affecting the complete Catalina District gas pipeline and has determined that the procedure complies with 49 CFR §192.615 (a)(6).

SP 406 and the Emergency Response Plan, Section 2.5 and 2.6 were reviewed and satisfactorily meet CA Public Utilities Code, Sections 956 (c)(1) & (2).

*“(a)(7) Making safe any actual or potential hazard to life or property.”*

SED reviewed the Emergency Response Plan and the SCE Incident Management Plan and has determined that both plans include procedures that comply with 49 CFR §192.615 (a)(7).

*“(a)(8) Notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency.”*

When SED reviewed all SP’s, Plans, and TP’s, for compliance with 49 CFR §192.615 (a)(1) and (a)(2), SED also considered 49 CFR §192.615 (a)(8). Recommendations for 49 CFR §192.615 (a)(1) apply to 49 CFR §192.615 (a)(8). In addition, compliance with 49 CFR §192.615 (a)(8) is further met by SCE holding table top and field exercises with fire, police, and other public officials which cover planned responses during an emergency annually.

Based on SED’s audit of applicable records SED has determined that procedures and liaison efforts meet the intent of 49 CFR §192.615 (a)(8). SED recommends that the Catalina District with support from SCE mainland personnel conduct annual table top or field exercises with police, fire, and other public officials on Catalina Island that includes both paid and volunteer first responders.

*“(a)(9) Safely restoring any service outage.”*

SED reviewed the revised Appendix D Emergency Shutdown and Restoration Procedure of Catalina District Petroleum Gas Pipeline, SP 406, Attachment B, which describes restoration of gas service as a result of an emergency situation affecting Catalina District gas pipelines and facilities and has determined that the procedure complies with 49 CFR §192.615 (a)(9).

However, SED recommends that Catalina District personnel also continue to refine their recovery plan to include emergency isolation zones and critical/emergency valves for shut down and recovery procedures.

The Emergency Response Plan was revised since the audit to include a reference to the Employee Assistance Program (EAP) as a resource for employees to manage stress during and after major events or incidents. Section 2.19 of the Emergency Response Plan includes this revision.

*“(a)(10) Beginning action under §192.617, if applicable, as soon after the end of the emergency as possible.”*

SED reviewed SP 415 for investigation of failures and Section 2.19 of the Emergency Response Plan and has determined that compliance with 49 CFR §192.615 (a)(10) has been met satisfactorily.

*“(a)(11) Actions required to be taken by a controller during an emergency in accordance with §192.631.”* This section of the code does not apply to the Catalina District. The control room referenced in this audit letter does not meet the control room requirements as defined in 49 CFR §192.631.

*“(b) Each operator shall:*

*(b)(1) Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures.”*

SED reviewed SP 406 and the training rosters for all standard procedures for 2015 and 2016. The Emergency Response Plan is Attachment A to SP 406. SED also verified that training and distribution of all standard procedures for all Catalina District personnel is listed in the SCE maintenance management data base (SAP) as an annual activity.

SED has determined that compliance with 49 CFR §192.615 (b)(1) has been met satisfactorily.

*“(b)(2) Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.”*

SED reviewed SP 406 and the training rosters for all standard procedures for 2015 and 2016. The Emergency Response Plan is Attachment A to SP 406. SED also verified that training and distribution of all standard procedures for all Catalina District personnel is listed in the SCE maintenance management database (SAP) as an annual activity.

The SAP system includes specific activities during Emergency Response Plan training that includes the following:

- Solicit feedback from all employees on changes and training and collect responses and consider details for updates.

SP 400, Operations, Maintenance, and Emergency Response Plan Manual, includes attachment 400-1 for employees to fill out that includes their SCE manual recommended changes along with rationale for changes.

SP 400, Section 5.0 describes the supervisor's responsibility to review annually, or more frequently as needed the work performed by direct reports to ensure that the procedures in use are adequate.

In addition, SED verified that the “Field Safety and Training Observation Form” includes a checklist to review all Catalina District operator qualification tasks including abnormal operating conditions. The form also includes a specific section for observers to fill out that states in summary the following:

- Was training effective? If not, describe in writing and describe opportunities for improvements.

The Catalina District personnel also received ICS Training as listed in the SCE Incident Management Program, Section A and B, titled Initial Qualification and Requalification. SED verified initial qualification records for 2014 and requalification records for 2015. Initial qualification training included the Federal Emergency Management Agency (FEMA) Emergency Management Institute IS 100, IS 200, ICS 300, and IS 700 independent study courses.

SED has determined that compliance with 49 CFR §192.615 (b)(2) has been met satisfactorily. In addition, training the Catalina District personnel on the ICS and preparing the SCE Incident Management Program meets the requirements of General Order 112-F, Section 143.6, Compatible Emergency Response Standard.

*“(b)(3) Review employee activities to determine whether the procedures were effectively followed in each emergency.”*

SED verified that the “Field Safety and Training Observation Form” includes a checklist to review all Catalina District operator qualification tasks including abnormal operating conditions. The form also includes a specific section for observers to fill out that states in summary the following:

- Was training effective? If not, describe in writing and describe opportunities for improvements.

The Telephone Report of Customer Leaks form is signed by the supervisor verifying whether or not the employee completed the form correctly and what corrective actions are needed if the procedures were not properly followed.

The Catalina District personnel have also conducted table top emergency response exercises that included external fire, police, and other public officials. After action reports are prepared for all table top exercises to evaluate whether procedures were effectively followed and if not what the corrective actions will be.

SED has determined that compliance with 49 CFR §192.615 (b)(3) has been met satisfactorily.

*“(c) Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials to:*

*(c)(1) Learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency;*

*(c)(2) acquaint the officials with the operator's ability in responding to a gas pipeline emergency;*

*(c)(3) Identify the types of gas pipeline emergencies of which the operator notifies the officials;”*

SED reviewed records for all liaison activities for fire, police, and other public officials. The Catalina District personnel provided records for table top exercises in 2014, 2015, 2016.

SED also reviewed the Emergency Response Plan section 2.22 that describes the Public Liaison Activities that take place during the table top exercises.

During the table top exercises the Catalina District personnel learn the responsibility and resources of each government organization that may respond to a gas pipeline emergency; they acquaint the officials with the operator's ability in responding to a gas pipeline emergency; and they identify the types of gas pipeline emergencies of which the operator notifies the officials.

Each year a different emergency scenario is exercised in a class room setting with first responders and public officials. In addition, regulatory requirements, public liaison activities, the Gas Safety Plan, the Distribution Integrity Management Plan, the Public Awareness Plan, and the Emergency Response Plan were also discussed in summary with first responders during the table top exercises. Participants from the Avalon Fire Department, LA County fire Department, LA County Sheriff's Department, Harbor Master personnel, and the City of Avalon attended the table tops over the three year period.

The Catalina District personnel agreed during the audit to reach out to all first responder full time, part time, and reserve firefighters to encourage their participation during the 2016 table top exercises. This liaison activity will also meet the CA Public Utilities Code Section 956.5 which states that owners and operators of intrastate transmission and distribution lines, at least once each calendar year, shall meet with each local fire department having fire suppression responsibilities in the area where those lines are located to discuss and review contingency plans for emergencies involving the intrastate transmission and distribution lines within the jurisdiction of the local fire department.

<b><u>Organization</u></b>	<b><u>Quantity</u></b>	<b><u>Haz Mat Training Level</u></b>
Avalon Fire – Full Time	10	First Responder Operational
Avalon Fire – Reserve	30	Awareness
LA County Fire – Full Time	2	First Responder Operational
LA County Fire – Part Time (Paid – Patrol Firefighters)	12	Awareness

In addition, the Catalina District has agreed to conduct actual field exercises with first responders and public officials on a three year cycle. SED recommends when the field exercise are conducted that the electric and water crews also attend and that the exercise scenario incorporate a coordinated response to the emergency.

SED has determined that compliance with 49 CFR §192.615 (c), (1), (2), & (3) has been met satisfactorily. In addition, the current liaison activities and future planned fire fighter table top and field exercise will further meet the intent of CA Public Utilities Code Section 956.5.

SED has also determined that compliance with CA Public Utilities Code, Sections 956 (c)(3)(A)(B)(C)(E) has been met satisfactorily.

*“(c)(4) Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.”*

SED reviewed the Emergency Response Plan, Section 2.17 that describes Mutual Assistance. SCE is an active member in two mutual assistance agreements both with propane and gas operators, the California Utility Emergency Association (CUEA) agreement and the Western Region Mutual Assistance Agreement. The CUEA agreement is with investor owned utilities and municipalities in California and the Western Region agreement is with electric utilities throughout the Western United States and Canada.

In addition, based on collaboration during the audit the Catalina District personnel has partnered with the City of Avalon Department of Public Works to establish an emergency services Purchase Order, outlining the resources and equipment which may be utilized when responding to emergencies. The partnership will allow for prompt mobilization of equipment and resources during gas emergencies while providing guidelines to account for costs associated with the response activities.

Because the Catalina District is isolated from the mainland operations of SCE, SCE’s resiliency group has contracts in place to assist Catalina Island during emergency response and recovery time periods of a catastrophic event. Materials, tools, and labor can be flown or barged to Catalina Island as needed during an emergency event and for pilot re-light assistance during recovery. Contracts are in place to ensure these services are available as needed for the Catalina District. No other utilities exist on Catalina Island that can respond during an emergency under a mutual assistance agreement to specifically repair and or operate the propane system. The only entities that have been identified that can assist during an emergency are the local first responders, Harbor Master personnel, and the City of Avalon.

SED has determined that compliance with 49 CFR §192.615 (c)(4) has been met satisfactorily. In addition, SED has determined that compliance with CA Public Utilities Code, Section 956 (c)(3)(D) has been met satisfactorily.

SED reviewed the new CA Public Utilities Code, Section 955.5 with the operator during the audit and the Catalina District personnel agreed to revise their standard procedures to include the new requirements of as listed in the CA Public Utilities Code, Section 955.5.