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# **Environmental, Health and Safety Handbook** for Contractors

# Corporate Health and Safety Corporate Handbook

# **SCE-EHS-SAFETY-HB-1**

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#### 1.0 Introduction

To consistently deliver the electricity that powers homes and businesses within our 50,000+ square miles of service territory, Southern California Edison (SCE) relies on qualified employees and Contractors. To that end, SCE is committed to protecting the health and safety of our employees, Contractors, and the public. Our goal is to achieve an injury-free workplace and to protect the environment while performing our operations. To achieve this goal, SCE has developed a comprehensive environmental, health and safety (EHS) management system that includes policies, programs, procedures, and other documents that explain our approach to continuously improve our EHS performance. This Environmental, Health and Safety Handbook for Contractors (EHS Handbook) is an integral part of the EHS management system and may be updated as necessary to mitigate EHS issues.

**PURPOSE:** This EHS Handbook has been given to you to:

- Provide general guidelines and standards expected for performance of contracted work in a safe manner and with due regard for protecting workers, the public, and the environment.
- Ensure compliance with federal, state, and local EHS requirements.
- Ensure compliance with any additional requirements stipulated by SCE, including those in SCE's safety standards programs.

Additional information applicable to contract activities for specific SCE business organizations and/or site-specific policies and practices may be obtained from the Edison Representative. Further, in the event anything contained in this EHS Handbook is inconsistent with or contradicts the Contractor's existing EHS policies, procedures, practices, plans, or other similar documents, the Contractor shall promptly notify and discuss such inconsistencies or contradictions with the Edison Representative or delegate and obtain resolution prior to commencement of any work.

In this EHS Handbook, the term "OSHA" refers to either the California Division of Occupational Safety and Health (Cal/OSHA) or the Federal Occupational Safety and Health Administration (OSHA) as applicable. The use of the term "Edison Representative" (see Definitions) is used throughout this EHS Handbook to identify the person identified as such in a purchase order/contract.

Nothing in this EHS Handbook is intended to create an employment relationship between SCE and any Contractor or Subcontractor personnel. Contractors and Subcontractors remain solely responsible for any and all employment obligations to their workers, and all such workers are employees only of the entity or person that hired them.

### 1.1 SCE's Environmental, Health and Safety Policy

The SCE EHS Policy mandates compliance with SCE programs, procedures, and standards, as well as applicable EHS laws and regulations. Contractors are expected to establish similar requirements within their organizations. The policy states:

"Edison International and its subsidiaries (the "Company") are committed to assuring the safety and health of its employees and the public, and protecting the environment. Southern California Edison administers and publishes Environmental, Health and Safety (EHS) programs, procedures, and standards as necessary to implement this policy in compliance with applicable EHS laws and regulations. You are required to comply with the Company's EHS programs, procedures, and standards that apply to your job to assure environmental compliance and the health and safety of one another and members of the public."

#### 1.2 Safety Performance Policy

At its sole discretion, SCE can immediately suspend or terminate a contract and/or suspend or discontinue work of a Contractor/Subcontractor due to poor or non-compliant safety performance and/or failure to adhere to SCE's governing policies and procedures, and to applicable regulations.

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# 1.3 Principles of Operation

SCE performs its work based on the following principles of operation:

- We integrate EHS protection and prevention into our work processes.
- We identify and mitigate hazards and unsafe conditions before we start the work.
- No job is considered successfully completed, if there is an injury or an environmental event.
- If the job cannot be completed safely, it must be stopped.
- We watch out for each other and speak out to protect ourselves and others from injury and to protect the environment.
- We always follow regulatory requirements and safety rules.

# 1.4 Contractor Safety Management Standard

SCE's Contractor Safety Management Standard establishes uniform contractor safety requirements with additional safety protocols for contracts involving Tier 1 and Tier 2 work (see Definitions).

Major program elements include:

- Safety performance and program review and qualification by a Third Party Administrator (TPA) for Contractors and Subcontractors.
- Adoption of SCE safety requirements that exceed existing regulatory requirements.
- A Contractor Orientation performed with Tier 1 Contractors that includes development and review of a Hazard Assessment, Project-/Site-Specific Safety Plan, and Handbook for Contractors Checklist.
- Supervisory and safety professional oversight requirements.
- Ongoing evaluation of Contractors who perform Tier 1 work, or contracted work activities that are high-risk, and without implementation of appropriate safety measures, are potentially hazardous or life-threatening.
- Field monitoring procedures, including safety observations and Contractor Safety Quality Assurance Reviews (CSQARs).
- Mitigation procedures for unsafe work practices or conditions.
- Regular Contractor Forums to engage our vendors and continuously improve SCE's safety system.

# 2.0 GENERAL EXPECTATIONS

SCE expects each Contractor to ensure their workers, subcontractor workers, and agents know of and comply with environmental and safety regulations and SCE requirements.

### 2.1 Applicability

The requirements and expectations set forth in this EHS Handbook apply to all Contractors, their Subcontractors, and agents.

SCE employees shall adhere to the requirements in Section 6.0 – Incident Reporting, and for all contracted, subcontracted, and chartered aircraft operations performed at SCE, the use of Company-owned, Contract, and Chartered Aircraft Policy and the processes and procedures contained therein shall be adhered to in addition to this EHS Handbook.

New contracts shall comply with this EHS Handbook as of January 2, 2017. Existing contracts shall comply with this handbook as of January 2, 2017, with the exception of Section 2.2, where they shall comply with the standards within 90 days of initiation of formal review of performance and programs by the TPA.

# 2.2 Safety Performance and Program Review of Tier 1 Contractors/Subcontractors

Contractors/Subcontractors who currently perform or intend to perform Tier 1 work for SCE shall submit safety performance data and programs to the TPA for review, classification, and monitoring. Prior to earning contract award, Contractors/Subcontractors must complete the Tier 1 Safety Performance and Programs Review by the TPA.

The TPA reviews and scores Tier 1 Contractor/Subcontractor safety programs against all applicable local, state, and federal regulations with which Contractors/Subcontractors are required to comply, including, but not limited to, Cal/OSHA and Federal OSHA regulations and any additional requirement stipulated by SCE, including those in SCE's safety standards and programs.

Following initial review and during the ongoing monitoring of the Tier 1 safety performance and programs, the Contractor/Subcontractor is classified into one of three categories indicating the degree to which requirements for safety performance and programs are met: Qualified, Conditional, and Unqualified.

- Qualified Contractors meet or exceed SCE-established standards for safety performance and programs and are approved to perform Tier 1 work at SCE.
- Conditional Contractors exhibit areas that may be below SCE and/or industry standards in their safety
  performance, but are qualified to perform work at SCE, with the condition that additional mitigation procedures
  are in place to ensure safe work practices are followed. Conditional Contractors must meet SCE-established
  standards for the safety program. Qualified Contractors currently performing work at SCE may be placed on
  Conditional Contractor status for a period of time based on their performance specific to their SCE contract.
- Unqualified Contractors do not meet SCE and/or industry standards for safety programs and/or safety performance, and shall not perform work at SCE.

Conditional Contractors shall submit requisite explanations and mitigation plans to Supply Chain Management where the intent is that the Contractor shall perform work or is currently performing work for SCE in fulfillment of the Conditional Contractor Plan.

# 2.3 Expectations for Tier 1 and Tier 2 Contractors

In addition to the provisions in other sections of this EHS Handbook, Tier 1 and Tier 2 Contractors shall:

- Take all prudent and proper EHS precautions to protect SCE employees and property, other exposed persons and property, and the environment.
- Comply with all applicable SCE EHS standards, as well as any additional requirements provided by the Edison Representative.
- Comply with applicable federal, state, local, and any other applicable EHS laws and regulations issued or imposed by any governmental authority, as well as any additional requirements provided by SCE.
- Prior to commencement of any work, review job-specific hazards and associated precautions, procedures, and mitigation measures. This can be accomplished by developing a Job Safety Analysis (JSA), Activity Hazard Analysis (AHA), etc., and communicating with its employees and subcontractors.
- Have available, at the work location, a copy of the Contractor's written Safety Program, including, but not limited to, the Site-Specific Injury and Illness Prevention Plan (IPP), Code of Safe Practices for construction work, and written Hazard Communication Program, as applicable.
- Ensure that their employees and their subcontractors receive EHS training as required by applicable federal, state, and local regulations and maintain documentation of such training.
- Maintain copies of permits, licenses, registrations, certifications, etc., as required by applicable federal, state, and local regulations, and SCE contractual obligations.
- Ensure periodic EHS inspections are performed to identify and correct unsafe conditions in their work areas.
- Ensure a Stop Work procedure is in place where work is immediately stopped any time unsafe conditions or behaviors are observed until the job can be completed safely.
- Become familiar and comply with SCE site-specific EHS requirements applicable to the work being performed.
- Ensure at all times, when on an SCE job site, that at least one Contractor employee has the capability and responsibility for communicating safety and emergency information with all Contractor personnel. This Contractor employee shall have sufficient comprehension of the English language, such that the employee is able to read, understand, follow, and communicate to others all posted safety signs and written warnings, directions given during a safety or security drill or exercise, written or oral instructions or directives pertaining to health and safety matters, and all site-specific written Health and Safety Plans.

### 2.4 Expectations for Tier 1 Contractors

In addition to the provisions in other sections of this EHS Handbook, Tier 1 Contractors shall:

- Provide a supervisor/person in charge who is responsible for the general work area or Tier 1 work involving multi-employee crews or multi-employee job sites. This person shall ensure rules/policies pertaining to the job are followed; safe work practices are utilized; and that risks and hazards associated with the job are identified, discussed, and mitigated prior to commencing work. The supervisor/person in charge is expected to identify and correct any unsafe work practices or other performance deficiencies that may occur; however, Contractor employees are not required to be in the line of sight of supervisors at all times. The Contractor shall, therefore, assure this requirement is met during the Hazard Assessment process. The Edison Representative or delegate shall review this requirement with the Contractor during the Contractor Orientation process and assure compliance during Field Safety Observations.
- Provide a dedicated Safety Professional in support of the work where Tier 1 projects exceed 50 employees.
   For larger Tier 1 projects involving 100 or more Contractor/Subcontractor employees, the Edison and Contractor Representatives shall determine the appropriate number of additional Safety Professionals required to support the project considering the nature of the tasks performed and the associated risks during the Hazard Assessment Process. SCE reserves the right to request that additional dedicated Safety Professionals support the project based on other factors associated with the scope of work, such as the

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degree of complexity or risk associated with the project. The Edison Representative or delegate shall review this requirement with the Contractor Representative during the Contractor Orientation process, and ensure compliance during Field Safety Observations and when SCE performs CSQARs.

- Work with SCE performing CSQARs, which are onsite and detailed assessments ensuring contractual safety commitments are actually implemented in the field. Imminent hazard(s) shall be addressed immediately.
- Ensure the development and implementation of a plan to provide additional supervisory oversight for newly hired Contractor workers during their first 6 months of employment and for workers during the first 6 months following assignment to a new role (e.g., newly promoted lineman, supervisor).
- Develop and maintain a formal training program, which at a minimum, includes orientation training for newly hired Contractor employees and periodic continuing training in relevant topics for all Contractor employees.

### 2.5 SCE Stop Work Authorization and Inspection

Compliance with safety and environmental requirements and safe practices is expected for Contractors working for SCE. Contractors should understand that:

- SCE may inspect the Contractor's work for compliance with the Contractor's contractual obligations at any time.
- SCE may immediately stop work if an imminent risk to workers or the public is observed.
- SCE's inspections in no way relieve the Contractor of the obligation to maintain its own programs or to conduct any inspections required by federal, state, and local regulations.
- Any imminent hazard shall be corrected to SCE's satisfaction before the work is allowed to continue.

**Note:** Failure to adhere to an SCE employee's order to stop work shall be considered a breach of contract.

#### 2.6 Use of Subcontractors to Perform Tier 1 Work

Contractors intending to utilize Subcontractors to perform Tier 1 work shall:

- Be responsible for the Subcontractor and their work performance at all times when carrying out work for SCE.
- Notify SCE of their intention to use Tier 1 Subcontractors during the Hazard Assessment process and at any
  time prior to commencement of work by a Subcontractor, which shall be documented in the Contractor Safety
  Management Standard Appendix D: Hazard Assessment. Failure to notify the Edison Representative of the
  use of a Subcontractor could result in the immediate dismissal of the Contractor from a project.
- Make necessary preparations for its Tier 1 Subcontractors to undergo the same qualification process as Tier 1 Contractors to properly manage the time it takes to undergo review by the TPA.

#### 3.0 CONTRACTOR ORIENTATION

Within 15 calendar days after receipt of notice to proceed or in advance of the Tier 1 Contractor's start of work (whichever is sooner), the Contractor Representative shall participate in a Contractor Orientation, which is performed in collaboration with the Edison Representative, by ensuring the review/development of the following:

- a. Hazard Assessment (Appendix D of the Contractor Safety Management Standard)
- b. Project/Site-Specific EHS Plan
- c. Handbook for Contractors Checklist (Attachment C)

The Contractor Representative and Edison Representative shall review and sign these documents prior to the start of work using the Contractor Orientation Review Form (Appendix E of the Contractor Safety Management Standard). The Contractor Representative shall conduct a Contractor Orientation for their crews, including Subcontractors, as well as any new employees/Subcontractors that begin work on the project subsequent to the original Contractor Orientation. The Contractor shall maintain a signed copy of the Contractor Orientation Review Form at the job site.

#### **Hazard Assessment**

Prior to the start of work, Tier 1 Contractors shall review and provide input (if any) to the Hazard Assessment for the work to be performed that identifies potential health and safety issues and hazard mitigation associated with the project and the project locations. Once reviewed together with the Edison Representative or delegate, the Contractor Representative shall sign the document indicating that he or she understands the items contained in the Hazard Assessment and will ensure compliance with the requirements and mitigation of the identified hazards.

#### Project/Site-Specific EHS Plan

Prior to the start of work, Tier 1 Contractors shall develop and submit to the Edison Representative or delegate, a Project-/Site-Specific EHS Plan that addresses each hazard identified in the Hazard Assessment and that minimally includes the following components:

- a. Identification of safety roles and responsibilities for Contractor employees
- b. Name and contact information of the Contractor's safety representative(s) and key personnel
- c. List of the Subcontractor to be used and a description of the process for managing the Subcontractors
- d. Description of daily tailboard/Job Hazard Analysis (JHA) protocol
- e. Competent/qualified personnel qualifications and training records (as applicable)
- f. Emergency Action Plan, including emergency medical contact information and evacuation procedures
- g. Planned method of job-site communications
- h. Any other site-specific procedures as required

Source Contractors, which are Contractors who perform repetitive project work under an agreement that lasts for an extended period of time, shall develop and submit a Project-/Site-Specific EHS Plan that addresses each hazard identified in the Hazard Assessment for Source Contractors. The Source Contractor Project-/Site-Specific EHS Plan shall address Items a through h (above), with the site-specific items and hazards being identified and discussed through daily tailboarding and JHA. The Source Contractor Project-/Site-Specific EHS Plan shall be completed in conjunction with the Hazard Assessment at the start of the contract, reviewed annually, and updated when changes are made to the Hazard Assessment.

#### **Handbook for Contractor Checklist**

Tier 1 and Tier 2 Contractors shall review the Handbook for Contractors Checklist (Attachment C) with the Edison Representative, covering requirements contained in this EHS Handbook. The checklist review shall provide opportunities for questions and dialogue regarding expectations of Contractors/Subcontractors working at SCE. The Contractor Representative shall ensure the Handbook for Contractor Checklist is signed.

# 4.0 JHA REQUIREMENT AT ACTIVE CONSTRUCTION SITES

Prior to the commencement of work at each active construction site, a written JHA shall be posted at the entry, stopping all personnel and requiring them to review and sign the JHA. The JHA shall include, at minimum, crew foreman, site-specific location, emergency information, description of the work being performed, known hazards, hazard mitigation, required personal protective equipment, Underground Service Alert number and expiration date (if applicable), safe zones, and considerations for public protection. JHAs shall be conducted prior to the start of work, at the changes in shift, after lunch, and/or whenever conditions change.

#### 5.0 EMERGENCY RESPONSE

Each occupied SCE facility has an Emergency Action Plan that describes the alarms and emergency notification system, evacuation routes, assembly areas, and emergency contacts. Contractors are responsible for understanding the requirements of the Emergency Action Plans where they perform work.

#### 6.0 INCIDENT REPORTING

SCE requires Contractors to notify the Edison Representative of all Safety Incidents. These Safety Incidents include First-Aid incidents, injuries above First Aid, Close Call, Safety Violation, Vehicle Accident, Property Damage, Equipment Failure, Crew-Caused Circuit Interruption, Unplanned Outage, Primary Electrical Flash, Secondary Electrical Flash, Switching, Wiring/Conductor, Grounding Incident, Hazardous Material Release, Environmental Incident, Customer Complaint/Negative Contact, and Fire Incident types.

# **6.1 Contractor Notification Requirements**

The Contractor shall take appropriate steps to secure the site to prevent further incident and immediately notify the Edison Representative of the incident with a phone call and email backup confirming the communication.

Contractors shall send completed Part 1, and when applicable, Parts 2a and 2b, reports to the following SCE personnel and emails:

- a. Your Edison Representative or designee (All Incidents)
- b. Your Supply Chain Management Representative (All Incidents)
- c. Notify the International Brotherhood of Electrical Workers (IBEW) Local 47 of all Circuit Interruptions (Sroberts@ibew47.org, Rpeterson@ibew47.org, MHernandez@ibew47.org).

Agency	Agency Notification Requirement	Outside Normal Work Hours				
OSHA	Within 8 hours of the initial report					
Department of Transportation (DOT)	Within 2 hours of knowledge	No longer than 4 hours after becoming aware of a reportable incident				

### 6.2 Contractor Reporting Requirements

Contractors shall complete and send the Contractor Incident and Evaluation Report (Attachment A: Parts 1, 2a, and 2b) to the Edison Representative and Supply Chain Representative as follows:

- Within one (1) business day, Contractor completes and submits the Preliminary Incident Report Part 1, Section 1.1 to 1.4.
- Within five (5) calendar days, Contractor updates Sections 1.1 to 1.4 as necessary and completes the Five Day Update Report (Part 2a) for the following incidents types: Serious Injury/Illness, Fatality, Life Altering,

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Life-Threatening, and Potential Life-Threatening or Altering Incidents, OR if the cause and corrective actions are NOT identified and documented in Part 1.

Within 60 calendar days, Contractor shall complete the Final Report Part 2b for the following incidents types:
 Serious Injury/Illness, Fatality, Life-Altering, Life-Threatening, and Potential Life-Threatening or Altering
 Incidents (see Attachment B for guidance). If an extension of due date for the Final Report Part 2b is required
 due to the complexity of the incident, an extension can be approved by the SCE Director of Supply Chain
 Management, or Transmission & Distribution Director or designee.

Contractors shall submit all associated photos and additional documentation in a single PDF file via email to the Edison Representative when submitting Parts 1, 2a, and 2b of the Contractor Incident and Evaluation Report.

Contractors shall track corrective action completion with an owner and due date within their own tracking system.

# 6.3 Edison Representative Requirements

The Edison Representative or delegate shall ensure the following:

- Notifications are made regarding defined California Public Utilities Commission (CPUC), OSHA, and Serious Injury Incidents immediately to the Grid Control Center.
- The Contractor's incident investigation is reviewed for accuracy and acceptance. Within 1 business day, the Edison Representative shall send the report to the following distribution lists:
  - TDIncidentReporting@sce.com (All Incidents)
  - CCIIncidentReporting@sce.com (Circuit Interruptions only)
  - CorpSafetyStatisticsDataMgmt@sce.com (Serious Injury, Fatality, Injury/Illness/Close Calls Incidents only)
  - GOTSPILL@sce.com (Hazardous Materials Spills only)
- The Contractor has completed all notification and report requirements within the allotted timeframes as described in the Contractor Notification and Report Requirement sections above.
- Data is entered from Part 1 Preliminary Incident Report (see Attachment A) into EHSync as soon as possible but within 2 business days of receiving from the Contractor.
  - NOTE: When entering incident into EHSync, the response to the question, "Was the Injury Assistance Program offered to the employee?" will always be "No."
- Part 2a Five Day Update Report (see Attachment A) is entered as an attachment in EHSync with the associated incident as soon as possible but within 2 business days of receiving from the Contractor.
- Part 2b Final Report (see Attachment A) is attached with any associated photos/documentation as soon as possible but within two (2) business days of receiving from the Contractor.
- The Executive Summary from Part 2b (see Attachment A) Final Report is entered into the EHSync Executive Summary data field. If the summary is too large, summarize to minimally show the findings and corrective actions
- Parts 1, 2a, and 2b (see Attachment A) is sent within two (2) business days of receipt to the following:
  - Contract Representative
  - Contract Manager
  - o Immediate Manager
  - Claims Representative (as directed)
- Claims is consulted on sharing/gathering of further information. If advised to do so, the Edison Representative advises the Contractor to add any new details and resubmit Parts 1, 2a, or 2b (see Attachment A).
- The Contractor has a tracking system and completion is monitored periodically.

#### 7.0 ADDITIONAL REPORTING REQUIREMENTS

# 7.1 Hazardous Materials Release or Environmental Event Reporting

Contractors shall immediately notify the Edison Representative of any chemical spills or releases inside or outside any SCE facility.

Within one (1) business day, the Contractor shall submit the Contractor Incident and Evaluation Report Part 1 (see Attachment A) via email to the Edison Representative copying SCE's Environmental Services Department (ESD) at GOTSPILL@sce.com.

Contractors shall make every reasonable effort to immediately contain and clean up hazardous materials releases. If special training is required to respond to the release, the Contractor is responsible to ensure their employees are properly trained or utilize properly trained response Subcontractors. The Edison Representative may provide specific cleanup and waste disposal instructions.

### 7.2 Transportation-Related Incidents

Any SCE vehicle involved in a Serious Injury accident or involved in a third-party accident shall be stored at the Transportation Services Department (TSD) Pomona facility and under control of an assigned Claims representative. Nothing may be removed from the vehicle, no pictures may be taken, nor may it be shown without the prior consent of the assigned SCE Claims representative.

All aviation-related incidents shall be reported immediately to Aircraft Operations and follow Title 14 of the Code of Federal Regulations Part 830.

### 7.3 Regulatory Agency Visit

Contractors shall:

- Verbally notify the Edison Representative or delegate upon notification or arrival of a regulatory agency during the course of contracted work.
- File a report to the Edison Representative and Corporate Health and Safety (CHS) or ESD within 24 hours after conclusion of the initial visit. The report shall provide the date, time, location, agency, agency representative name and contact information, purpose of visit, information requested and/or provided, corrective actions resulting from the visit, if applicable, and due dates.
- Provide regular updates to the Edison Representative regarding management of the corrective actions and any interim visits.
- Provide the Edison Representative and CHS or ESD final close-out documentation within five (5) business days after the requirements of the regulatory agency have been satisfied.

# 7.4 OSHA Citation and Investigations

Contractors shall immediately notify the Edison Representative of any OSHA citations, pending OSHA investigations related to the contracted work, or Serious Injury/Illness or Fatality.

The Edison Representative shall notify the SCE Claims Department and Corporate Health and Safety (CorpSafetyStatisticsDataMgmt@sce.com) of any OSHA citations, pending OSHA investigations related to the contracted work or Serious Injury/Illness or Fatality.

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### 8.0 HEALTH AND SAFETY REQUIREMENTS

The following health and safety requirements are not intended to cover all aspects of a safety program. The following information is intended to assist Contractors in the development of safe work practices and safety plans.

#### 8.1 General Health and Safety Requirements

Contractors shall:

- Ensure its work procedures do not conflict with the health and safety requirements of SCE policies, standards, and programs
- Take precautions for the protection of the health and safety of Contractor personnel, SCE's employees, or other exposed persons, including the public
- Ensure that all specialized equipment (e.g., aerial lifts, cranes, man-lifts, fork trucks) are operated and maintained in accordance with manufacturer's specifications and as required by applicable regulations.

# 8.2 Confined Space Entry

A permit-required confined space inventory is available for SCE facilities that have permit-required confined spaces onsite. These spaces are identified and classified based on the conditions at the time of the survey. Contractors are responsible for evaluating their work site to determine if confined spaces exist. The Contractor performing work within a confined space (permit required, non-permit, or other confined space) shall comply with applicable confined space regulations and associated SCE requirements.

In addition, each Contractor shall:

- Ensure that information regarding any hazards are identified prior to entering the space and SCE's experience with the confined space is obtained from the Edison Representative
- Prior to entering the space, provide information to the Edison Representative regarding any hazards that the Contractor's work may create in the confined space
- Ensure identified hazards are eliminated, mitigated, or controlled
- Develop a rescue plan, including provision for trained rescue personnel and equipment, before entering the permit-required confined space
- Coordinate all entry operations when work includes both SCE personnel and Contractor personnel who will be working in or near the confined space
- Debrief with the Edison Representative when the confined space operation is completed

#### 8.3 Fall Protection

Contractors shall:

- Conduct evaluations of all elevated workplaces to determine the appropriate level of fall protection for their employees.
- Use 100% fall protection, unless exempted by the OSHA standard. Where conventional fall protection is not
  possible or feasible, the Contractor shall develop a written Fall Protection Plan, following applicable OSHA
  regulations and associated SCE requirements.
- Ensure all workers are instructed in the fall protection system to be used and the procedures to be followed where there is a risk of fall hazard.

#### 8.4 Fire Prevention

A site-specific fire prevention plan is available for SCE facilities. This plan identifies potential fire hazards and methods to prevent and to properly respond to fires when at SCE sites. Contractors are to be familiar with and comply with these site-specific requirements.

Each Contractor shall:

- Report all fires extinguished by the Contractor to the Edison Representative. If a Contractor uses an SCE fire
  extinguisher, they shall report such usage to the Edison Representative.
- Ensure that employees and subcontractors do not smoke in any non-smoking areas, including inside all buildings.
- Communicate and coordinate any impairment to fire protection systems with the Edison Representative prior to shutdown of any such system.

#### 8.5 Hazard Communication

- Before starting a new job, each Contractor shall advise the Edison Representative of all hazardous substances to be used in the workplace. Safety Data Sheets (SDSs) on such hazardous substances shall be readily available to the workers, SCE, or a regulatory agency.
- The Edison Representative shall inform the Contractor of any known hazardous substances used in the work area where the Contractor will be working. An SDS for such substances shall be readily available upon request by the Contractor.

#### 8.6 Heat Illness Prevention

A Heat IPP is required when employees are engaged in outdoor operations where the environmental risk factors for heat illness may exist during the work period. The Contractor shall comply with SCE's Heat Illness Prevention Program.

Prior to commencing work, Contractors shall:

- Evaluate work conditions or a work environment that present the risk of heat illness or heat stress.
- Ensure a Heat IPP has been prepared in accordance with regulatory requirements, and all personnel are trained on the plan, and comply accordingly.
- Ensure controls, such as providing sufficient potable water and providing a shaded recovery area, are in place per regulation.
- Ensure the Contractor's specific acclimatization procedure is implemented when applicable.

#### 8.7 Hot Work

A site-specific hot work plan is available for SCE facilities. This plan identifies designated areas where hot work may be performed without authorization. The plan also contains the names of personnel at the site who may authorize hot work (any task that may produce sparks, such as welding, grinding, and/or cutting).

Contractors performing hot work at an SCE facility shall comply with the following:

- Inform the Edison Representative of the intent to perform hot work, including in non-designated areas.
- Perform hot work in compliance with Contractor's Hot Work Program and ensure the work procedures do not conflict with the SCE Hot Work Program.

#### 8.8 Housekeeping/Cleanup

- Each Contractor shall maintain a clean and orderly work area at all times.
- When the work is completed, each Contractor shall remove any Contractor-owned materials from the site or dispose of them in accordance with the Waste Handling, Storage, Transport, and Disposal section of this EHS Handbook.
- Restoration of ground disturbance, including re-vegetation, shall be in accordance with the contract or as directed by the Edison Representative.
- Contractor shall remove all trash and debris from the job site before leaving each workday.

# 8.9 Industrial Hygiene

The Edison Representative will inform Contractors of known chemical and physical hazards. Each Contractor or Subcontractor shall inform the Edison Representative of chemical and physical hazards that the Contractor's work creates.

#### **Asbestos**

SCE buildings and structures (including vaults) may contain asbestos materials (e.g., roofing materials, gaskets, thermal system insulation, gypsum wallboard and joint compound, ceiling tiles, exterior stucco, pipes, window glaze, floor coverings, including mastic, fireproofing, cable, cable wrap, transite panels, transite ducts, wire insulation).

- Prior to beginning work that could disturb suspect asbestos-containing construction materials (ACCM) or suspect asbestos-containing materials (ACM), the Edison Representative must verify that an asbestos survey has been conducted. If a survey has not been conducted, the Edison Representative shall contact CHS to request a survey.
- Each Contractor must verify with the Edison Representative that a survey has been conducted and ACM and ACCM have been identified and abated. If ACM or ACCM is identified, the SCE Representative shall use an SCE-approved asbestos abatement contractor to abate identified materials. The Edison Representative shall notify CHS and SCE's EHS personnel/Environmental Specialist to coordinate any abatement activities.
- Contractors shall immediately report to the Edison Representative any suspect ACM or ACCM that has not been surveyed. The suspect ACM or ACCM shall not be disturbed until approval from the Edison Representative is obtained to resume operations.
- Contractors shall immediately report to the Edison Representative any
  uncontrolled/unauthorized disturbance of ACM or ACCM. Contractors shall cease all
  operations in the immediate area of the disturbed material, until approval to resume operations
  is obtained from the Edison Representative.

#### Lead

Many SCE buildings and structures constructed before 1980 may have components painted with lead-containing or lead-based paint.

- Prior to beginning work that could disturb suspect lead-containing or lead-based paint, the SCE Representative must verify that a lead survey has been conducted. If a survey has not been conducted, the Edison Representative shall contact CHS to request a survey.
- Each Contractor must verify with the Edison Representative that a lead survey has been conducted and that appropriate controls are identified.
- All work impacting SCE housing or recreational facilities in which lead paint could be disturbed
  must be coordinated through the Edison Representative to ensure exposures are evaluated for
  possible removal prior to the start of work.

#### **Noise**

The Contractor shall inform the Edison Representative of activities or operations that could expose SCE employees to noise levels that exceed 85 decibels (dBA).

#### Non-lonizing Radiation except EMF

The Contractor shall inform the Edison Representative of the use of any equipment that produces non-ionizing radiation.

 Whenever any Contractor uses a Class 3A or greater laser, the Contractor shall inform the Edison Representative of such use, identify each piece of equipment in which a laser is installed, and implement appropriate controls to prevent exposure to the laser beam. This includes alignments, surveying, and welding/cutting lasers.

Potential Radio Frequency (RF) Energy Exposures at SCE Facilities Contractors working near antennas at SCE facilities or beyond RF alert signs, as illustrated below, shall understand the meaning of the signage and maintain appropriate distance from antennas or use proper personal protection monitoring at the work site through appropriate RF Safety Training. This is to prevent Workers from inadvertently getting RF over-exposure according to the Federal Communications Commission occupational maximum permissible exposure limits. Any required training shall be the responsibility of the Contractor to complete for their personnel.

**Note:** All antennas are to be considered energized unless confirmation has been obtained that they have been de-energized, and will remain de-energized, in accordance with appropriate procedures prepared by the Contractor.

### Signal Word







**WARNING** 



**DANGER** 



Sign Color

Blue

Yellow

Orange

Red

# 8.10 Lockout/Tagout

An inventory of equipment covered by SCE's Hazardous Energy Control Program (Lockout/Tagout) is available for SCE facilities where applicable.

#### Contractors shall:

- Comply with its Hazardous Energy Control Program and ensure the work procedures do not conflict with the requirements of the SCE Hazardous Energy Control Program or OSHA Lockout/Blockout-Tagout methods and procedures.
- Obtain written authorization from the Edison Representative or delegate to lockout SCE equipment.
- Upon completion of the job, notify the Edison Representative so operation of the equipment can be resumed after the lockouts have been removed.

#### 8.11 Trenching and Excavations

Contractor employees are expected to be aware of the steps that must be undertaken and OSHA permit(s) required prior to beginning any excavation, trenching, drilling, and/or shoring activity.

Contractors shall:

- Perform trenching, excavation, drilling, and/or shoring work in accordance with applicable regulations and requirements
- Provide a competent person (see Definitions) to assess the soil, plan and permit, inspect the excavation, and engage engineering professionals as needed
- Ensure employees are properly protected from falls created by the work
- Ensure "Dig Alert" has been contacted and subsurface installations have been marked prior to earth moving activities
- Have readily available at the site when required, a copy of the OSHA permit (i.e., depths greater than 5 feet)
   and a completed activity notification form for the annual permit holder as required by the regulation

**Note:** Contractors shall obtain permits to drill soil borings or install wells as required by state or local jurisdictions.

# 8.12 Use and Operation of SCE Facilities, Materials, Equipment, and Vehicles

Contractors shall not use or operate SCE facilities, materials, equipment, and/or vehicles unless specifically authorized in writing by the Edison Representative.

#### 8.13 Work Area Protection and Traffic Control

- Prior to commencing work, Contractors shall inform the Edison Representative of any potential danger to SCE personnel, the public, or other exposed persons.
- When necessary, each Contractor shall isolate the Contractor's work areas from SCE operations, employees, or other exposed persons by using appropriate warning tape, barriers, or other effective means of isolation.
- Each Contractor shall erect and properly maintain, at all times, all necessary safeguards for the protection of Contractor personnel, SCE's employees, and other exposed persons.
- Where approved signs or barricades do not provide the necessary traffic control, qualified and properly equipped flaggers shall be provided.

# 8.14 High Voltage Work

Prior to commencing work, Contractors shall:

- Ensure each employee is trained and instructed in the hazardous conditions relevant to the employee's work and is protected as required by applicable OSHA regulations and SCE requirements.
- Require the use of safety devices and safeguards where applicable.
- Furnish such safety devices and safeguards as may be necessary to make the work as free from danger as
  reasonably possible. Examine or test each safety device at such intervals as necessary to ensure that it is in
  good condition and adequate to perform the function for which it is intended. Instruct employees to inspect
  each safety device, tool, or piece of equipment each time it is used and to use only those in good condition.
  Devices furnished by the Contractor found to be unsafe shall be repaired or replaced.

#### 9.0 Environmental Requirements

#### Contractors shall:

- Comply with all applicable of federal, state, and local environmental regulations, as well as the terms and conditions of the contract and SCE environmental standards.
- Inform the Edison Representative should there exist concerns about any environmental regulatory requirements, and resolve any ambiguity prior to continuing work.
- Abide by all avoidance and minimization measures contained in the written project environmental clearance
  issued by ESD or other environmental requirements associated with environmental review (e.g., mitigation
  measures, applicant-proposed measures). If the project scope changes from that originally reviewed and
  cleared by ESD or avoidance measures cannot be undertaken as planned, create safety hazards for the work
  crew, or create conflicts with project objectives, the Contractor shall immediately contact the Edison
  Representative.
- When undertaking new and upgraded electrical system work involving voltages of 50 kilovolts (kV) and greater, the Contractor shall obtain guidance from the Edison Representative regarding project environmental and regulatory requirements prior to starting work, as additional regulatory requirement may apply, including filing advice letters and public notification.

### 9.1 Air Quality and Air Emissions

#### Each Contractor shall:

- Secure all required air permits for its own equipment without encumbering SCE with compliance obligations for that equipment.
- Operate equipment and perform work in compliance with applicable air regulations and air permits.
- Prepare and maintain any repaired logs, reports, or notifications, and provide copies to the Edison Representative upon request.

# 9.2 Biological and Archaeological/Historical Sensitivities

#### Contractors shall:

- Refrain from driving off established roads or performing grading, blading, trenching, digging, and/or vegetation removal, except within the bounds of an environmental clearance issued by ESD.
- Comply with SCE's Avian Protection Program by immediately reporting to the Edison Representative any bird
  mortalities at SCE facilities (substations, distribution lines, and transmission lines), not conducting work that
  may disturb active nests (i.e., nests with eggs or young birds) without prior approval from ESD, and avoiding
  tree-trimming or other potentially disruptive maintenance or construction activities in sensitive areas (e.g.,
  riparian habitat) during nesting season (generally February through August) without prior approval from ESD.
- Stop work and contact the Edison Representative, if archeological, paleontological, or human remains are discovered.

#### 9.3 Field Work Activities

#### Contractors shall:

- Provide personnel appropriate environmental training, which includes information regarding those resources
  and required avoidance and minimization measures, if an environmental clearance identifies sensitive
  biological or cultural resources or other environmental resources and sensitivities.
- Verify with the Edison Representative or delegate that the proper permits have been obtained to enter land not owned by SCE and that there are programs in place to comply with the permits.

# 9.4 Hazardous Materials, Handling, Storage, and Transport

Contractors shall:

- Maintain all required transportation permits, approvals, authorizations, logs, reports, or notifications, and provide copies to the Edison Representative upon request.
- Notify the Edison Representative immediately of any spills (of any quantity) or DOT-Reportable Incidents.
- Within one (1) business day, the Contractor shall submit the Contractor Incident and Evaluation Report, Part 1 (see Attachment A) via email to the Edison Representative copying ESD at <a href="mailto:GOTSPILL@sce.com">GOTSPILL@sce.com</a>.

#### 9.5 Water Quality

- When working with hazardous materials, Contractors shall employ Best Management Practices to prevent spills from entering a storm drain.
- Most SCE facilities have Storm Water Management Plans (SWMPs) as required by the SCE Corporate Storm Water Management Program. Contractors shall comply with the requirements of the SWMP.
- Contractors shall not discharge any material into storm drains, sewers, or waterways, unless the discharge complies with the site's SWMP and applicable laws, regulations, and permits.
- If any land disturbance totaling one (1) acre or more is required (including, but not limited to, temporary roads, parking areas, and material laydown areas), the Contractor shall contact the Edison Representative to determine whether a Water Quality Management Plan, Storm Water Pollution Prevention Plan (SWPPP), or other water quality compliance document needs to be developed or permit must be obtained. Additional water quality requirements by the Municipal Separate Storm Sewer System (MS4) municipality could be imposed for land disturbance of less than one (1) acre.
- If any land disturbance beyond the approved project scope of work occurs, including spill cleanup, dredging, and filling in a waterway, the Contractor shall immediately notify the Edison Representative.
- When dewatering from a utility vault or underground structure, Contractors shall adhere to SCE's EN2 document (Underground Structure Water Handling and Disposal procedure), and meet the requirements of the current General Vault Discharge Permit issued by the state.
- When commercial vehicle washing is performed at an SCE facility, Contractors shall ensure that wastewater runoff does not enter a storm water drain. The waste water must either be directed to an onsite wash rack/clarifier or be collected and disposed out of the SCE facility in accordance with applicable laws and regulations and pending approval of the Edison Representative.

# 9.6 Waste Handling, Storage, Transport, and Disposal

Contractors shall:

- Coordinate waste management resulting from an SCE project with the Edison Representative
- Not dispose any SCE hazardous waste at facilities other than those that are authorized and approved by ESD
- Maintain any required logs, reports, or notifications and provide copies to the Edison Representative upon request
- Deliver Generator copies of Uniform Hazardous Waste Manifests to the Edison Representative within 48 hours of hazardous waste shipments

#### 10.0 DEFINITIONS

#### Actual Life Altering

Injury, illness, fatality, or incident occurring in a place of employment, or in connection with employment, resulting in a permanent and significant loss of a major body part or organ function; permanently changes or disables normal life activity; or requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation. Some examples include significant head injuries, spinal cord injuries, paralysis, major amputations, catastrophic fractured bones, and serious burns (highly visible, such as to the face or neck).

### Actual Life-Threatening

Injury, illness, fatality, or incident occurring in a place of employment, or in connection with employment, requiring immediate life-preserving rescue action, that if not applied in an immediate fashion, would likely result in the death of that person. These cases usually require the intervention of emergency response personnel to provide life-saving support. Some common examples would include significant blood loss, damage to the brain or spinal cord, use of CPR or AED, chest or abdominal trauma affecting vital organs, and serious burns (third degree over a major portion of the body).

# Competent Person

One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate the existing and predictable hazards.

# Conditional Contractors

Tier 1 Contractors who, following safety performance and program review by the TPA, exhibit areas that may be below SCE and/or the industry standard in their safety performance but are qualified to perform work at SCE, with the condition that additional mitigation procedures are in place to ensure safe work practices are followed.

#### Contractor

The party entering into a contract to perform work for SCE. This term is also applicable to the Contractor's agent, person, or persons authorized to represent the Contractor, such as the Contractor's superintendent or foreman.

# Contractor Representative:

The Contractor employee named in the contract or appointed by the Contractor to act on behalf of the Contractor.

#### Close Call

An event where no personal injury was sustained and no property was damaged, but where, given a slight shift in time or position, damage and/or injury easily could have occurred.

# CPUC-Reportable Incidents

The CPUC defines reportable injuries as those that meet any of the following criteria:

- Fatality or personal injury rising to the level of inpatient hospitalization
- Are the subject of significant public attention or media coverage
- Damage to property of the utility or others estimated to exceed \$50,000 and are attributable or allegedly attributable to utility-owned facilities

#### **Deliverables**

Documentation, material, and any other works and services or deliverables delivered by Contractor to Edison under the Agreement.

# DOT-Reportable Incidents

During the course of transportation in commerce (including loading, unloading, and temporary storage) as a direct result of a hazardous material:

- A person is killed
- A person receives an injury requiring admittance to a hospital
- The general public is evacuated for 1 hour or more
- A major transportation artery or facility is closed or shut down for 1 hour or more or the operational flight pattern or aircraft routine is altered
- Fire, breakage, spillage, or suspected radioactive contamination occurs involving a radioactive material

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- Fire, breakage, spillage, or suspected contamination occurs involving an infectious substance other than a diagnostic specimen or regulated medical waste
- A release of a marine pollutant in a quantity exceeding 450 liters (119 gallons) for liquids of 400 kilograms (882 pounds) for solids; or a situation exists of such a nature (e.g., a continuing danger to life exists at the scene of the incident) that, in the judgment of the person in possession of hazardous material, it should be reported to the National Response Center even though it does not meet these criteria
- An unintentional release of a hazardous material from a package (including a tank) or any quantity of hazardous waste that has been discharged during transportation

#### Edison Representative

An SCE employee responsible for managing the work performed under a contract. The Edison Representative may designate a trained SCE point of contact who is familiar with the contract work being performed.

# **Environmental Incident**

Any incident involving a release of potentially hazardous material and/or unauthorized substance into the air, ground, storm drain, waterways, etc., or any action that violates federal, state, or local environmental laws and regulations. Any release that requires reporting to any federal and/or state agency is considered an environmental incident.

#### First-Aid Incident

The definition criteria of First Aid is available at: Cal/OSHA (Chapter 7. Division of Labor Statistics and Research Subchapter 1. Occupational Injury and Illness Reports and Records Article 2. Employer Records of Occupational Injury or Illness) §14300.7 General Recording Criteria (b) (5) (B). Can be described as an injury, illness, or incident requiring medical attention that is usually administered immediately after the injury occurs and at the location where it occurred, and often consists of a one-time, short-term treatment and requires little technology or training to administer. First aid can include cleaning minor cuts, scrapes, or scratches; treating a minor burn; applying bandages and dressings; the use of non-prescription medicine; and drinking fluids to relieve heat stress.

#### Hazardous Material

Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment, if released into the workplace or the environment. Hazardous materials include hazardous substances, hazardous wastes, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment, if released into the workplace or the environment. Substances that are flammable, corrosive, reactive, oxidizers, combustible, or toxic are considered hazardous. Examples are oil, fuels, paints, thinners, compressed gases (e.g., acetylene, carbon dioxide, oxygen, nitrogen), radioactive materials, and pesticides.

#### **Hazardous Waste**

A waste, or combination of wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in serious, irreversible, or incapacitating reversible illness, or pose a substantial present or potential hazard to human health, safety, welfare or to the environment when improperly treated, stored, transported, used, or disposed of or otherwise managed; however, this does not include solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under section 402 of the Federal Water Pollution Control Act of 1967 as amended, or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954.

#### Incident

An event that results in an injury, illness, or close call.

#### Injury/Illness

Condition or disorder. Injuries include, but are not limited to, a cut, fracture, sprain, or amputation. Illnesses include both acute and chronic illnesses, including, but not limited to, a skin disease, respiratory disorder, or poisoning.

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EHS Handbook for	r Contractors	SCE-EHS-SAFETY-HB-1						
Minor Injury/Illness	Injury, illness, or incident that is not life threatening or altering but requires more attention than just First Aid.							
Potential Life Altering	A possible life-altering injury, illness, or incident that is more likely to occur than NOT to occur had the circumstances been different.							
Potential Life Threatening	A possible life-threatening injury, illness, or incident that is more likely to occur than NOT to occur had the circumstances been different.							
Property Damage	Any incident involving loss and/or damage to SCE-ow reporting requirement applies only to incidents that or authorized contracted work and/or services on behalf	cur in the course of performing						
Qualified Contractors	Tier 1 Contractors who, following safety performance or exceed SCE-established standards for safety performapproved to perform Tier 1 work at SCE.							
Regulatory Agency Visit	Site visit by a federal, state, or local agency that has rutility operations and initiates a visit or contract to eva							
Safety Professional	A certified safety employee whose responsibility is solely that of ensuring safe work practice and compliance with safety and health regulations.							
Serious Injury	The definition to be used for "serious work injuries" had Definitions:  Any injury or illness (including death) occurring in with any employment which requires inpatient hos hours for other than medical observation or in which member of the body or suffers any serious degrees	a place of employment or in connection pitalization for a period in excess of 24 ch an employee suffers a loss of any						
Services	The services and deliverables, if any, to be provided by applicable scope of work and the corresponding purch							
Source Contractor	A business or person employed by a Contractor to car SCE as part of a larger project.	rry out specific parts of a contract for						
Subcontractor	Any person who enters into an agreement with the Coperform or furnish any portion of the work associated							
Third Party Administrator (TPA)	A professional service provider contracted by SCE to evaluate contractor safety performand and programs on behalf of SCE.							
Tier 1	A designation assigned to contracted work activities that implementation of appropriate safety measures, are possible to these activities may include, but may not be construction, trenching and excavation, demolition, activated energized electrical work, transportation of hazardwork, working at heights, cleanup and remediation of hazardinaterial waste, use of heavy machinery and equipment	tentially hazardous or life threatening. be limited to, air operations, general vities requiring lockout/tagout, line-crew bus chemicals, confined space entry, hot azardous substances or hazardous						
Tier 2	A designation assigned to contracted work activities the and not typically considered hazardous.	nat are lower-risk or routine in nature						
Unqualified Contractors	Tier 1 Contractors who, following safety performance meet SCE and/or industry standards for safety perform cannot perform work at SCE.							

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# 11.0 REVIEW/REVISION HISTORY

Rev.	Date	Description of Revision	Contact
0	2/15/08	Initial distribution.	T. Roberts
1	6/9/08	Added discussion of the EHS Contractor Orientation Checklist and the sufficient English language comprehension requirement (2.1 h).	T. Roberts
2	6/19/08	Editorial changes, expanded definition of Edison Representative.	T. Roberts
3	10/1/09	Feedback from SCE organizations and legal review. Deleted the terms "directing and approving" from the discussion on the Edison Representatives responsibilities in Section 1.0 on Page 4.  Added definition of DOT Reportable incidents.	T. Roberts
4	11/01/10	<ul> <li>Editorial changes. Approved by:</li> <li>Cecil R. House, Senior Vice President, Safety, Operations Support &amp; Chief Procurement Officer</li> <li>William Messner, Acting Director, Corporate EHS</li> <li>James P. Meyers, Director, Supply Chain Management</li> </ul>	T. Roberts
5	7/17/12	<ul> <li>Feedback from all SCE organizations and legal review. Significant additions and/ or revisions include:</li> <li>Added new content to address New Construction projects.</li> <li>Added new content to address contracted jobs that do not involve purchase orders and the responsibilities to conduct Contractor EHS Orientations.</li> <li>Provided reporting clarification for injury and environmental incidents.</li> <li>Revised the process for completing and submitting written reports for non-serious injuries and property damage incidents. Contractors will complete and submit a monthly report to Corporate Health and Safety. Added a reporting template for contractors to use.</li> <li>Added new content involving the areas of Radio Frequency (RF) Exposures and Industrial Hygiene.</li> <li>Added new content and detail involving the Water Quality section of the handbook.</li> </ul>	Albert Chin
6	6/15/15	Editorial changes and new requirements related to the implementation of the Contractor Safety Management Standard.	S. Hart
7	12/1/16	Changes to align with the 2017 Contractor Safety Management Standard enhancement, including the addition of the Handbook for Contractors Checklist. Major revision to the Incident Reporting Section and the Incident Evaluation Report.	J. Parker

# 12.0 ATTACHMENTS

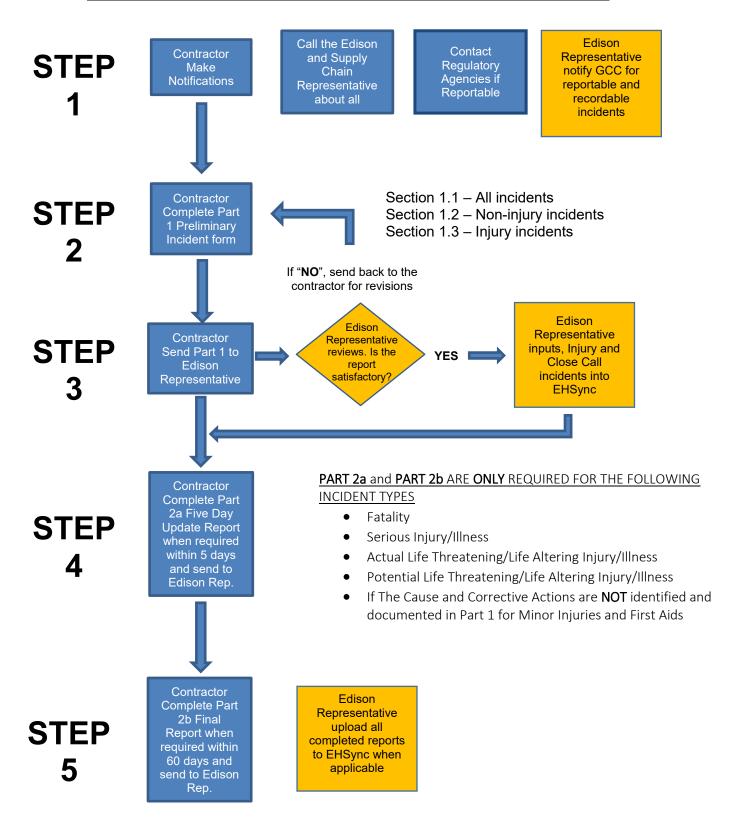
Attachment A: Contractor Incident and Evaluation Report

Attachment B: Contractor Incident and Evaluation Report: Final Report Guidance

Attachment C: Handbook for Contractors Checklist

Part 1 – Preliminary Incident Report

#### HOW TO COMPLETE ATTACHMENT A - CONTRACTOR CAUSE EVALUATION REPORT



Part 1 – Preliminary Incident Report

#### **INCIDENT REPORTING**

Southern California Edison requires contractors to notify the Edison Representative of all Safety Incidents. These Safety Incidents include: First Aid incidents, injuries above first aid, Close Call, Safety Violation, Vehicle Accident, Property Damage, Equipment Failure, Crew Caused Circuit Interruption, Unplanned Outage, Primary Electrical Flash, Secondary Electrical Flash, Switching, Wiring/Conductor, Grounding Incident, Hazardous Material Release, Environmental Incident, Customer Complaint/Negative Contact, and Fire incident types.

#### **Notification Requirements**

Contractor shall take appropriate steps to secure the site to prevent further incident and immediately notify the Edison Representative of the incident with a phone call and e-mail back up confirming the communication.

Contractors shall send completed Part 1, and when applicable Part 2a and 2b, reports to the following SCE personnel and emails:

- a. Your Edison Representative or designee (All Incidents)
- b. Your Supply Chain Management Representative (All Incidents)
- c. Notify the IBEW Local 47 of all Circuit Interruptions (<u>Sroberts@ibew47.org</u>, Rpeterson@ibew47.org, MHernandez@ibew47.org).

Agency	Agency Notification	Outside Normal Work Hours
	Requirement	
OSHA	Within 8 hours of the initial	
	report	
DOT	Within 2 hours of knowledge	No longer than 4 hours after becoming aware of a
		reportable incident

#### CONTRACTOR REPORTING REQUIREMENTS

Contractors shall complete and send the Contractor Incident and Evaluation Report (Attachment A: Part 1, 2a, & 2b) to the Edison Representative and Supply Chain Representative as follows:

- Within one (1) business day, Contractor completes and submits the Preliminary Incident Report Part 1, Section 1.1 to 1.4.
- Within five (5) calendar days, Contractor updates Sections 1.1 to 1.4 as necessary and completes the Five (5) Day Update Report (part 2a) for the following incidents types: Serious injury/illness, Fatality, Life Altering, Life Threatening, and Potential Life Threatening or Altering Incidents, OR if the cause and corrective actions are NOT identified and documented in Part 1.
- Within sixty (60) calendar days, Contractor shall complete the Final Report Part 2b for the following incidents types: Serious injury/illness, Fatality, Life Altering, Life Threatening, and Potential Life Threatening or Altering Incidents (see Attachment B for guidance). If an extension of due date for Part 2b Final Report is required due to the complexity of the incident, an extension can be approved by the SCE Director of Supply Chain Management, or T&D Director or designee.

Contractors shall submit all associated photos and additional documentation in a single PDF file via email to the Edison Representative when submitting Parts 1, 2a, and 2b of the Contractor Incident and Evaluation Report.

Part 1 - Preliminary Incident Report

Contractors shall track corrective action completion with an owner and due date, within their own tracking system.

Contractors shall track corrective action completion with an owner and due date, within their own tracking system.

#### **EDISON REPRESENTATIVE REQUIREMENTS**

The Edison Representative or delegate shall ensure the following:

- Notifications are made regarding defined CPUC, OSHA and Serious Injury Incidents to the Grid Control Center immediately.
- The contractor's incident investigation is reviewed for accuracy and acceptance. Within one business day, the Edison Representative shall send the report to the following distribution lists:
  - TDIncidentReporting@sce.com (All Incidents)
  - CCIIncidentReporting@sce.com (Circuit interruptions only)
  - CorpSafetyStatisticsDataMgmt@sce.com (Serious Injury, Fatality, Injury/Illness/Close Calls incidents only)
  - GOTSPILL@sce.com (Hazardous Materials Spills only)
- The Contractor has completed all notification and report requirements within the allotted timeframes as described in the Contractor Notification and Report Requirement sections above.
- Data is entered from Part 1 Preliminary Incident Report (see Attachment A) into EHSync as soon as possible but within 2 business days of receiving from the Contractor.
  - NOTE: When entering incident into EHSync, the response to the question, "Was the Injury Assistance Program (IAP) offered to the employee?" will always be "No."
- Part 2a Five Day Update Report (see Attachment A) is entered as an attachment in EHSync with the associated incident as soon as possible but within 2 business days of receiving from the Contractor.
- Part 2b Final Report (see Attachment A) is attached with any associated photos/documentation as soon as possible but within two (2) business days of receiving from the Contractor.
- The Executive Summary from Part 2b (see Attachment A) Final Report is entered into the EHSync Executive Summary data field. If the summary is too large, summarize to minimally show the findings and corrective actions.
- Part 1, 2a and 2b (see Attachment A) is sent within two (2) business days of receipt to:
  - Contract Representative
  - o Contract Manager
  - o Immediate Manager
  - o Claims Representative (as directed)
- Claims is consulted on sharing/gathering of further information. If advised to do so, the Edison Representative advises the Contractor to add any new details and resubmit Parts 1, 2a, or 2b (see Attachment A).
- The Contractor has a tracking system and completion is monitored periodically.

Part 1 – Preliminary Incident Report

All other incident information will only be collected on this form

# SECTION 1.1 – GENERAL INFORMATION

The Edison Representative must enter the incident into EHSync if any boxes in

this column are checked.

Complete the table below to indicate the type of incident is being reported. Check **ALL** that apply.

Injury / Illness Close Call		Crew Caused Circuit Interruption		Switching Wiring/Conductor			Property Damage		
		Unplanned Outage					Customer Complaint/ Negative Contact		
Environmental			Primary Electrical Flash		Ground	ing Incide	nt	Fir	
Hazardous Mate	erial Release		Secondary Electrical Flash		Operati Tools/E			Sa	fety Violation
					Equipm	ent Failur	е	Ve	ehicle Accident
eporting Person (Cont	ractor) * indicates	required							
First Name: *			Name of Edison en contacted:	nployee					
Last Name: *			Check if Subcontra	ctor inv	olved:	Y	es		No
Company Name: *			Subcontractor Con	npany N	ame:				
E-mail:			Date of initial repo (Edison Representa						
Purchase Order #:			Control Number:						
Work Order#:			(SEE SECTION 1.4 F		ITPOL NILI	NADED INIC	TDLICT	LIUNIS)	
USA Ticket #:			(SEE SECTION 1.4 F	ON CON	TROL NO	IVIDEI\ IIVO	INOCI	ПОМЭ	
Title (Brief Description):  Description of Event: *									
Cause (Why did it happen?):*									
Immediate actions taker (actual actions taken):*									
Extent of Condition (could this event happer anywhere else, if so where?):	n								
Recommended Actions:	*								

Part 1 – Preliminary Incident Report

#### What Happened? (continued)

Was SCE vehicle involved?		Yes	No	
Were other employees injured or ill:*		Yes	No	Unknown
Injured at Edison Facility?:*		Yes	No	Unknown
Did or could this injury have resulted in a serious injury or fatality (SIF):*		Yes	No	Unknown

#### Type of work:

Transmission Line Construction	Line Clearing	Civil Construction	Substation	Other
Distribution Line Construction	Vegetation	Power Production	Traffic Control	Office

#### When did it happen?

	11		
Date: *		Time (military time): *	

Where did it happen?

where did it happen?	
Department/Where Incident Occurred:	
Location: *	
Area within Location? *	
County: *	
Street address:	
City: *	
State: *	
Postal Code: *	

#### \* - Required Field

NOTE: Minor Injuries and First Aids only require Part 1 to be completed,

HOWEVER if a cause is NOT identified, a Part 2a Five-Day Update Report will be REQUIRED

Part 1 – Preliminary Incident Report

# SECTION 1.2 - NON-INJURY INCIDENTS

duty policy? \*

Unknown

<u> 3ECTION 1.2 – NO</u>	IN-IINJORT IIN	CIDEN 13				
Crew Caused Circuit Inter	ruption/Switching	g/Wire Conductor/	Oth	er Incident		
Project Name:		[	Distri	ct:		
Scope of Work:		S	Sector:			
Circuit:		[	Distri	ct/Trans Region:		
SECTION 1.3 — INJ THIS SECTION SHOULD B			REF	RESENTATIVE F	OR INJURY OR ILLN	ESSES ONLY
Severity of Injury (select	the highest level)					
Life Threatening Ac	tual (highest)	Life Altering Ad	ctual		Minor Injury/I	llness
Life Threatening Po	tential	Life Altering Po	oten	tial	First Aid (lowe	est)
Who was injured? *						
Employee/Supplem w/PERNR	nental Worker	Contractor w/o	Contractor w/o PERNR			additional comments )
Does the injured party repsupervisor?	oort to an SCE	Yes		No		
First Name (Injured Person): *				Last Name: *		
Org Unit:				Company: *		
E-Mail:			Phone:			
Job Classification: *				<u> </u>		
How did the incident or exposure occur? *						
'						
Date and Time Supervisor of injury? *	first knew	Date			Time	
Injured while	Yes	Comments:				
performing company	No					
duties? *	Unknown					
Did a rule, policy, or procedure violation	Yes	Comments:				
occur?	No					
Did an unsafe act or	Yes	Comments:				
work practice occur?	No					
Does the incident meet the criteria for post	Yes	Comments:				
incident testing set forth in the fitness for	No					

# Part 1 – Preliminary Incident Report

Did the individual lose at	Yes	S	Comments	:			
least one full work day	No	)					
after date of injury? *	Un	known					
Additional Comments:							
		1		T	T		
Body Part: *	Head	Lower E	xtremities	Upper Extremities	Neck	Trunk	Multiple Body Parts
Choose one (X)							

# Injured Person Condition/Status and Treatment:

Fatality: *	Yes	No		
Treatment Beyond First Aid: *	Yes	No		Unknown
Unconsciousness: *	Yes	No		Unknown
Immediate Resuscitation: *	Yes	No		Unknown
Treated in Emergency Room: *	Yes	No		Unknown
Hospitalized Overnight: *	Yes	No		Unknown
Where is the employee being treated?:		1	1	
Physician Name:				

# Object or Substance that directly injured individual: \* Pick one below (X); Not otherwise classified (NOC)

	Abnormal Air Pressure	Absorption, Ingestion, or Inhalation, NOC	Animal or Ins	ect		Broken Glass			Caught In or Between, NOC			
	Chemicals	Cold Objects or Substances		Collapsing Materials (Sides of Earth)			-			n or ipe with r vehicle		Collision with a fixed object
	Contact with NOC	Continual Noise	Crash of Airpl	Crash of Airplane			Crash of Rail Vehicle		Crash of Water Vehicle			
	Cumulative NOC	Cut, puncture, scrape, NOC	Dust, Gases, I or Vapors	Dust, Gases, Fumes, or Vapors			cal t		Electrical Flash			
	Explosion or Flare Back	Fall greater than 4 feet	Fall less than 4 feet	Fall less than 4 feet			Fall, Slip or Trip, NOC		Falling or Flying Object			
	Fellow Worker, Patient, or other person	Fire or Flame	Foreign Matt Eyes	oreign Matter in yes			From Different Level		Other			
Did t	he individual lose at least	ate of injury? *		Yes		No		Unknown				
Date	Supervisor first knew of i		•									
Injur	Injured while performing company duties? *					No			Unknown			

Part 1 – Preliminary Incident Report

# Activity of injured person? \* Check ONE below

ing  Inding / Beling/ Beling/ Butting  Ving/Riding in Bnicle  Orking with Bice Materials  Ind Tool or Bichine in Use	Standing  Climbing (pole)  Employee Does Not Know  Working with Customer Offsite  Hand Tool, Utensil, not	Typing/ Mousing Climbing Ladder/ Tower/ Wall Entering/ Exiting Vehicle Working on Pole	Confident  Lifting/ Ca  From ladd Scaffoldin	ial arrying der or	Walking (No Stairs)  Digging  Operating Disconnects/ Switching	
eeling/ uatting ving/Riding in nicle orking with ice Materials	Employee Does Not Know  Working with Customer Offsite  Hand Tool,	Ladder/Tower/ Wall Entering/ Exiting Vehicle Working on Pole	Lifting/ Ca	nrrying Her or	Operating Disconnects, Switching	
orking with ice Materials	Not Know  Working with Customer Offsite  Hand Tool,	Exiting Vehicle  Working on Pole	From lado	ler or	Switching	
ice Materials  nd Tool or	Customer Offsite Hand Tool,	Pole				
	· ·	rr. L.P		g	From liquid or Grease Spills	
	Powered	Holding or Carrying	Holding or Hot Objects or Substances		Into openings – shafts, excavations, floor openings	
nping or aping	Lifting	Machine or Machinery  Motor Vehicle (stuck against stepping on)		inst or	Motor Vehicle, NOC	
oving Parts of chine (Striking ainst or pping on)	Moving Parts of Machine (Struck or Injured by)	No injury – incident only	or handle	d (cut,	Object being lifted or handled (striking against or stepping)	
ject being ed or handled ruck by or ured by)	Object handled (caught in or between)	Object handled by others (caught in or between)	On ice or snow		On same level	
stairs	Other than physical cause of injury	Other – Miscellaneous, NOC	crime – Ro	obbery or	Powered hand tool, Appliance	
shing or Pulling	Radiation			·		
	•	Yes	No	Unkr	ıown	
ly part? *	Choose an item.	<u> </u>	1			
Description:						
e, policy, or procedur occur?	re Yes	No				
Did an unsafe act or Yes work practice occur?		No				
i i i i i i i i i i i i i i i i i i i	chine (Striking inst or oping on) ect being ed or handled uck by or red by) stairs hing or Pulling encident meet the crt forth in the fitness y part? * Description: , policy, or proceduroccur? safe act or tice occur?	chine (Striking inst or oping on)  ect being and or handled uck by or red by)  stairs  Other than physical cause of injury  hing or Pulling  Incident meet the criteria for post-incident to forth in the fitness for duty policy? *  The policy, or procedure occur?  Safe act or tice occur?  Indiving Parts of Machine (Struck or Injured by)  Object handled (caught in or between)  Other than physical cause of injury  Radiation  Choose an item.	chine (Striking inst or oping on)  ect being ed or handled uck by or red by)  Other than physical cause of injury  hing or Pulling  ncident meet the criteria for post-incident of forth in the fitness for duty policy? *  Description:  I Moving Parts of Machine (Struck or Injury – incident only)  No injury – incident only  Object handled by others (caught in or between)  Other — Miscellaneous, NOC  Yes  No  No  No  No  No  No  No  No  No  N	chine (Striking inst or oping on)  ect being ed or handled uck by or red by)  Other than physical cause of injury  hing or Pulling  Radiation  Octave the criteria for post-incident of torth in the fitness for duty policy? *  Choose an item.  Description:  oping on)  No injury — incident only  Object handled by others (caught in or between)  On ice or oping on)  Other than physical cause of injury  NoC  On ice or	chine (Striking inst or oping on)  ect being ed or handled (caught in or between)  Other than physical cause of injury  hing or Pulling  Radiation  Occurr?  Object handled (caught in or between)  No injury—incident only  Object handled by others (caught in or between)  Other + Other - Miscellaneous, NOC  Othe	

	,
First Name:	Last Name
Organizational Unit:	Company:
Email:	Phone:
Comments:	

Part 1 – Preliminary Incident Report

# SECTION 1.4 – CONTROL NUMBER DIRECTIONS

#### **Control Number Determination**

1) Determine and enter the Control Number and/or Revision Code followed by contractor name into the Control # field. The Control Number (e.g., MMYY00-RX) for the report is determined by the month, year, and monthly report count for all work types in the region followed by the revision code (if any).

Example 1: Control # "051501" represents the first report in the region for May.

Example 2: Revision code for subsequent versions are denoted by the letter R and sequence number – "051501-R1"

2) Name and save the file as a PDF. The file naming convention (XXX-MMYY00-RX-company) is determined by region code, month, year, monthly report count, revision code if applicable, and company name.

For example, the first report for the ACME company working in Metro East in May 2015 - "MET-051501-ACME".

Revision codes should be denoted in subsequent versions, e.g., "MET-051501-R1-ACME".

NOTE: The first report submission does not need a revision code but subsequent versions to a report should be denoted by the letter R and sequence number (XXX-MMYY00-RX-ACME), i.e., the first revision would be denoted as "MET-051401-R1-ACME.

Region Code				Control		Revision Code		Name
XXX	-	MM	YY	0		R	-	XXXX
Region		Month	Year	Report Count (by Region)		Revision Count		e.g. ACME
MET = Metro East		01 = Jan	15 = 2015	01 = 1 <sup>st</sup> Report of the month for Region		"Blank" = Original		
MWT = Metro West		02 = Feb	16 = 2016	02 = 2 <sup>nd</sup> Report of the month for Region		R1 = 1 <sup>st</sup> Revision		
SJQ = San Joaquin		03 = Mar	17 = 2017	03 = 4 <sup>th</sup> Report of the month for Region		R2 = 2 <sup>nd</sup> Revision		
SJC = San Jacinto		04 = Apr	18 = 2018	04 = 4 <sup>th</sup> Report of the month for Region		R3 = 3 <sup>rd</sup> Revision		
NCT = North Coast		05 = May	19 = 2019	05 = 5 <sup>th</sup> Report of the month for Region		R4 = 4 <sup>th</sup> Revision		
SRS = South Rurals		06 = Jun	20 = 2020	06 = 6 <sup>th</sup> Report of the month for Region		R5 = 5 <sup>th</sup> Revision		
DST = Desert		07 = Jul		07 = 7 <sup>th</sup> Report of the month for Region				
ORG = Orange		08 = Aug		08 = 8 <sup>th</sup> Report of the month for Region				
NRS = North Rurals		09 = Sep						
SUB = Substation		10 = Oct						
PPD = Power Prod.		11 = Nov						
LCC = Line Clearing		12 = Dec						

#### INFORMATION FOR EDISION REPRESENTATIVE ONLY

When entering incident into EHSync, the response to the question, "Was the Injury Assistance Program (IAP) offered to the employee?" will always be "No."

Part 2a – Five Day Update Report

Company Name:		Date of Incident:	
Summary of Event: Brief summary in chro of relevant events, act equipment status prio including termination State if CAL OSHA or C notified of this event.	tivities, or or to and of the event.		
Immediate Actions Ta (e.g. steps taken to se call emergency service the Edison Representa	cure the site, es, and notify		
Status of Injured Pers Fatality or Equipment Person(s) condition (e from hospital on 01/1 12 kv Bravo line return on 01/12/18).	:: .g., released 2/18 or		
Interim Actions Taker actions that are being prevent same or simil- final corrective action identified. List both op actions.	taken to ar events until s can be		
Potential Causes: List here any cause(s) explored. These are not to be final because the not complete.	ot considered		

Part 2a – Five Day Update Report

OSH	A Notifications:	Date:		Time:		Case#:				
Status of Cause Evaluation: Check all that are completed.										
	Evaluation Team Identified		Interviews Sche	eduled		Report In Progress				
	Vendor Hired to Perform Evalua	tion	Interviews Completed			Report Completed				
	Problem Statement Created		Analysis Condu	cted		Report Submitted				
Also, chall	lenges: use this section to provide any enges, reasons for delay, ide entities' involvement, etc.									

Part 2b – Final Report

# FOR GUIDANCE ON ANY SECTION IN THE FINAL REPORT, SEE ATTACHMENT B.

### **GENERAL INFORMATION**

Date of report approva	l:					
	Name:					
Report approved by:	Title:					
Evaluation Team Partici Name:	pants:	N	lame:			
Company:			ompany:			
Title:			itle:			
Name:		N	lame:			
Company:		С	ompany:			
Title:			itle:			
Name:		N	lame:			
Company:		С	ompany:			
Title:		Т	itle:			
Date of Incident:			ocation of			
Company of the injured worker		D	escription f injury			
		l .				
List name of injured person	Title		Title used	in the report	Years of Service	Years in Position
List names of involved people	Title	Title		in the report	Years of Service	Years in Position

Part 2b – Final Report

#### **EXECUTIVE SUMMARY**

[1-2 paragraphs - Briefly describe who, what, where, and how the event happened, paraphrase cause and major corrective actions. No more than one page.]
and major corrective actions. No more than one page.j
PROBLEM STATEMENT
PRODLEIVI STATEIVIENT
Des terrorial
<u>Requirement</u>
[1-2 sentences - State the governing requirement or standard or expectation.]
<u>Deviation</u>
[1-2 sentences - State the deviation from the requirement.]
Consequences
Consequences
[1-2 sentences - State the consequences (actual or potential) of the deviation.]

Part 2b - Final Report

#### **EXTENT OF CONDITIONS (EOCo)**

[Perform an evaluation that focuses on identifying where the same or similar problem or condition exists or may exist with other equipment, processes, personnel, or written instructions. State the parameters of the evaluation performed and if they can be used to determine if the same or similar condition exists. Example: We reviewed all the other work being performed for SCE – two identified Work Orders, #1234AB and #5432XZ. It was determined the same equipment defect exists on Work Order# 1234AB.]

List the actions taken to address each extent of condition scenario.

- When an extent of condition evaluation identifies more problems that are the same or similar, then develop corrective action(s) to address those problems and list in the Corrective Action Matrix section of this report.
- In the event an extent of condition evaluation cannot be completed within the time period of this cause evaluation, then assign a Corrective Action to complete the review.
- The Corrective Action should include direction to create additional corrective actions as identified during the extent of condition evaluation.]

<b>&gt;</b>	on Work Order# 1234AB replaced with a new model capacitor on 01/22/18 and passed acceptance test).

Part 2b – Final Report

#### **SEQUENCE OF EVENTS**

[Use a list or paragraph form to describe the sequence of events so the reader can get a visual picture of the timeline of events. Include times if relevant to the event and state whether the times are exact or approximate.]
ANALYSIS AND CAUSES
[Document your analysis process and the identified causes. For suggested analysis methods, see Attachment B of the EHS Handbook for Contractors]
OPERATIONAL EXPERIENCE
[Evaluate if there have been other similar events in the past 3 years while on a project for SCE and what the corrective actions were. State here if there have been similar events, the corrective actions, completion date and if they were successful or not.]

Part 2b – Final Report

LESSONS LEARNED (Not directly related to causal factors of this evaluation)

[State the lesson learned]
<b>Lesson Learned #1</b> – [State the reasoning behind the lessons learned and the actions being taken to address the lesson learned (e.g., During the course of this evaluation it was identified that the Crane driver had an expired driver's license. This expired driver's license did not cause or contribute to the equipment failure that caused this event.]

Part 2b – Final Report

#### **CORRECTIVE ACTION MATRIX**

Cause Evaluation Element	Description	Owner/OU/ Due Date
Problem Statement	[State the consequence, paraphrase]  [State the actions taken immediately after incident]	Completed
Immediate & Interim Actions	[Describe the actions that have been taken as interim until the evaluation could be completed. If multiple actions list them all.]	Owner OU
		Due Date
	[State the AC (paraphrase), and describe the action that addresses the AC. Add additional lines for each AC identified. If there are multiple actions, list them all].	Owner
Apparent Cause (AC):		OU
		Due Date
	[State the CC (paraphrase), and describe the action that addresses the CC. Add additional lines for each CC identified. If there are multiple actions, list them all.]	Owner
Contributing Cause (CC):	,	OU
		Due Date
	[State the EOCo (paraphrase), and describe the action that addresses the EOCo. Add additional lines for each EOCo identified. If none state NONE]	Owner
Extent of Condition:	, state	OU
		Due Date

#### **GENERAL INFORMATION**

List the date this report was approved, who approved it, and their title.

List those who participated as part of the evaluation team.

List general information about the event and persons involved in the incident:

- Date of Incident
- Location of Incident (e.g., city and general description; also state if this was an SCE facility)
- Company of the injured worker (e.g. Subcontractor ABC Company)
- Description of injury (e.g., 2<sup>nd</sup> degree burn to left side of face and left arm 3<sup>rd</sup> degree burn)
- List name of injured person, those involved with the incident (e.g. their foreman, supervisor, coworkers) including their formal work title, years of service with the company and years in position.
- List name of involved person, those directly involved with the incident (e.g. their foreman, supervisor, co-workers, planner, driver, etc.) including their formal work title, years of service with the company and years in position.
- Title used in report Do NOT use individual names in the report, list them once in the general information section and associate their name with a title that is used through the report (e.g. Johnny Doe Foreman #1, John Roe Lineman #1, Jane Doe Crane Driver #1).

#### **EXECUTIVE SUMMARY**

1-2 paragraphs - briefly describe who, what, where, and how the event happened, paraphrase cause and major corrective actions. No more than one page. State if an OSHA or CPUC or DOT notification was made, time and date.

#### **PROBLEM STATEMENT**

The Problem Statement aligns management and evaluators so they are both are in agreement as to what problem is to be solved.

The Problem Statement should be brief and should include the requirement/standard/expectation, deviation, and consequences (actual and potential). The Problem Statement does NOT include the cause.

The Consequence should highlight both the <u>actual</u> and <u>potential</u> consequences.

#### Example:

- Requirement, Standard, or Expectation: ABC company policy is committed to ensure all employees work safely and go home in the same condition they came.
- Deviation: On 01/22/18, Foreman #1 was involved in an ABC company vehicle roll-over accident.
- Consequence: <u>Actual</u>: Foreman #1 (driver) sustained four stiches to his right hand and the vehicle was salvaged. <u>Potential</u>: The accident was severe enough that Foreman #1 could have suffered Life Threatening Injuries.

#### **IMMEDIATE ACTIONS**

Immediate Corrective Action, steps taken without delay to resolve situations or conditions involving same or similar concerns, usually requires prompt attention.

#### Examples:

- Lineman #1 was taken by ambulance to Fairfield Hospital, treated and released with 4 stitches.
- The GCC was called and de-energizing a downed power line (12kv Bravo line in Barstow).
- Communicated the fall hazard to next two shifts (on 01/22/18) and barricaded the slippery floor with cones and safety tape.

#### **INTERIM ACTIONS**

A temporary action taken between the time a problem is discovered and when the final actions are complete to prevent or mitigate the effects of the problem, and/or minimize the probability of a repeat problem.

#### **Examples:**

- Removed the faulty Wire Cutter (SAP# 10148066) and destroyed those found on all ABC company trucks to prevent use.
- Stopped work using Chopper Truck until ABC Company workers (15 lineman) using this
  equipment received training from ABC Company Safety Representative on proper use of truck
  and associated equipment.

#### **EXTENT OF CONDITIONS (EOCo)**

Extent of Condition (EOCo) answers the question – *where else does the same or similar problem or condition exist* so the latent problem or condition can be eliminated or mitigated to prevent future events.

Determine where the same problem or condition exists or may exist with other equipment, processes, personnel, or written instructions. This review should be performed to the level of detail commensurate to the significance and consequence of the cause evaluation and should be performed early in the evaluation report process. For Potential Life Altering incidents, the EOCo may be bound to just this crew involved or specific equipment, for a fatality the EOCo should expand to the entire company.

#### Example:

A newly issued AMP Meter gives a mild shock to a technician. All newly issued AMP meters should be taken out-of-service until the cause and corrective action determined.

If a newly issued AMP Meter gives a shock and causes a fatality. All AMP meters should be taken out-of-service until the cause and corrective action determined.

#### **ANALYSIS**

The value in Analysis is it organizes large amounts of data, displays the logic for presentation, ensures quality to the evaluation, ensures a thorough evaluation, and builds credibility for the analysis.

Through analysis causes and corrective actions are identified.

Causal Factors are any factors that initiate the event, contribute to its outcome, or exacerbate its consequences. Causal factors are those actions, conditions, or events that <u>directly</u> or <u>indirectly</u> influence the outcome of a situation or problem.

Causes should have the following criteria:

- The problem would not have occurred had the cause(s) not been present.
- The problem will not recur due to the same cause(s) if the cause(s) are corrected or eliminated.
- Correction or elimination of the cause(s) will prevent occurrence of similar conditions.
- The magnitude of the incident would have been significantly less if the cause(s) had not been present.

#### **Analysis Types**

The depth of analysis is dependent on the actual and potential consequences of the event.

- Potential and actual Life Threatening or Life Alerting incidents require at least two types of analysis to ensure different perspectives are used to identify casual factors (e.g. Barrier Analysis and Event & Causal Factor Analysis are the two most widely used analysis types)
- Lesser injuries such as Minor Injury would only require one type of analysis (e.g. usually Standard Cause Evaluation Tool)

Note: Interviewing, data review, training document reviews, troubleshooting, records review, equipment testing, etc. are not analysis – this is how we start gathering information to determine "WHY" the Equipment Failed or Undesired Action/Condition occurred.

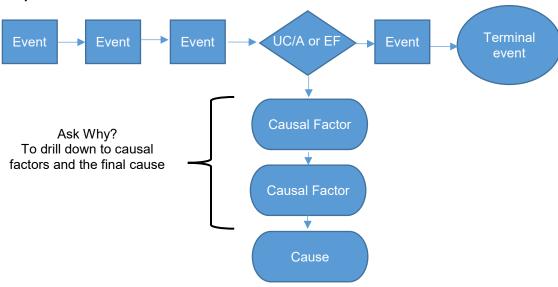
#### **Event & Causal Factor Analysis (ECFA)**

ECFA is a flow chart-based analysis method that uses symbols and directional flow lines to reconstruct the event by defining the sequence of events, Equipment Failure or Undesired Action/Condition, causal factors and causes (aka ECFA Chart).

How to perform an Event & Causal Factor Analysis:

- 1) Gather initial information, sequence of events and data
- 2) Define the Terminal Event (e.g. the injure or when the injured person is in a safe condition such as at the hospital)
- 3) Construct a preliminary timeline of steps leading up to the Terminal Event
- 4) Identify the Undesired Action/Condition (UC/A) or Equipment Failure (EF)
- 5) Identify the Causal Factors for each UC/A or EF
- 6) Determine the Cause(s) by asking "WHY" Apparent Cause(s), Contributing Cause(s)
- 7) Determine corrective action(s) for each cause.

#### **Example ECFA Chart**



#### **Barrier Analysis**

How to perform a barrier analysis:

- 1) Become Familiar with The Task/Activity
- 2) Determine those barriers/controls that should have caused/directed proper performance
- 3) Analyze to determine why they were ineffective
- 4) Evaluate potential missing barriers/controls that would have prevented the event
- 5) Determine "WHY" those barriers/controls did not exist

Barrier or control - any device, measure, or process that does one of the following:

- Promotes appropriate actions or conditions
- Prevents/Discourages/Detects/Compensates for Undesired Actions/Conditions or Equipment Failures

A table can be effective to demonstrate a barrier analysis. For example:

Consequence	Barrier analyzed	Effective or Ineffective and Why	
Vehicle Accident	Company Policies	Effective: The company has policies that restrict	
		employees from using cell phones while driving	
	Policy Use	Ineffective: The employee did not adequately apply	
		the company policy.	
	Qualification	Weak: The employee was qualified (life time	
		qualification) 20 years ago on use of this vehicle, but	
		has not driven this vehicle in the last 15 years.	

#### Other barriers to consider:

Change Management	Job Hazard Analysis	Barrier tape
Policies and Practices	Supervisory Oversight	Pre-job walk-down
Work Orders	Tailboards	Regulations
Qualifications	Training	Ground fault protective devices
Formal communications	Procedures/Guidelines	Job preparation
Specifications	Verification practices	Management Expectations

#### **Standard Cause Evaluation Tool**

The analysis assesses people, process, and equipment break-downs from an *individual*, *supervisory*, *program*, *procedure*, *and equipment failure p*erspective and includes typical breakdowns associated with each area.

The analysis starts on the left with individual performance, progress through supervisor, plan/procedure performance, to program/process performance as one ask question moving to the right. Equipment failures are also addressed.

Once a cause is identified (a YES), then perform a "WHY" Analysis

In some cases, there may be an <u>individual performance issue</u> that is not caused by a problem in one of the columns to the right. In cases like this, the performance issue is best dealt with in the performance management system, like coaching.

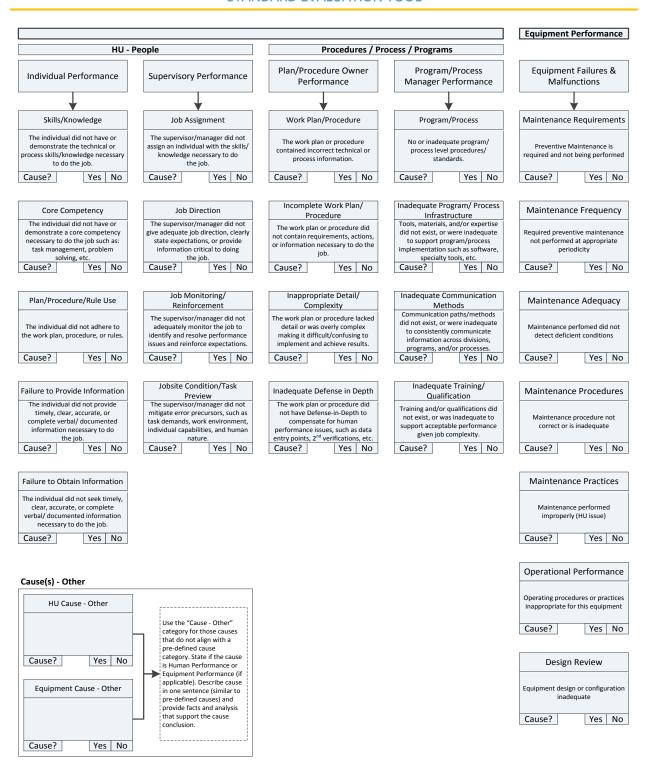
Asking "WHY" Analysis is the art of systematically drilling down to an actionable cause. It's a simple, yet effective way to determine the apparent cause in almost any situation. You must approach this analysis step by step with logical questions summarizing the observations from earlier questions. Essentially, you can find the apparent cause of a problem and show the relationship of causes by repeatedly asking the question, "Why?"

Another critical point in this analysis is knowing when to stop asking why. Knowing when to stop mostly depends on three questions:

- 1. How relevant are the questions and answers to the original problem you are investigating?
- 2. Did you find a cause that helps you control or prevent the problem?
- 3. Are the questions and answers significant enough, considering your problem statement?

The Standard Cause Evaluation Tool is useful in determining the Apparent Cause of an incident and stops when an individual/supervisor, procedure or process performance issue is identified. This is in contrast to a Root Cause, which identifies organizational and programmatic causes as when a fatality occurs.

#### STANDARD EVALUATION TOOL



Document the cause(s). For human performance incidents document the <u>person's response</u> in your evaluation (analysis section), as to "WHY they behaved the way they did."

#### STANDARD EVALUATION TOOL

#### **Using the Standard Evaluation Tool**

The Standard Evaluation Tool assesses human performance, process, program, procedure and/or equipment failures from a "people" (individual, supervisory), "procedure/program/process" or "equipment" perspective and includes typical breakdowns associated with each area.

Start the analysis on the left with individual performance, and progress to the right. Answer each **Yes/No** question.

Once a causal factor is identified (a **YES**), then perform a WHY Analysis, simply ask WHY until a fixable cause is identified.

For Human Performance incidents, when a **YES** is identified then ask WHY until you get to one of the "Human Performance Error Precursors" listed below, then ask WHY one more time, this is your cause.

Document the person's response in your evaluation, as to "WHY they behaved the way they did."

#### **Human Performance Error Precursors**

Task Demands (HPT)		Individ	lual Capabilities (HPI)
1.	Time Pressure	1.	Unfamiliar with task/first time
2.	High workload	2.	Lack of knowledge
3.	Simultaneous, Multiple tasks	3.	New technique not used before
	4. Repetitive actions/monotony	4.	Imprecise communication habits
	5. Irrecoverable Actions	5.	Lack of proficiency/inexperience
	6. Interpretation Requirements	6.	Indistinct problem solving skills
	7. Unclear goals, roles, or	7.	Can do attitude for crucial task
	responsibilities	8.	Illness or fatigue
	8. Lack of/unclear standards		
Work Environment (HPW)		Humar	n Nature (HPH)
1.	Distractions/Interruptions	1.	Stress
2.	Changes/departure from routine	2.	Habit patterns
3.	Confusing displays/controls	3.	Assumptions
4.	Work around/OOS instrumentation	4.	Complacent/overconfidence
5.	Hidden system response	5.	Mind set (intentions)
6.	Unexpected equipment conditions	6.	Inaccurate risk perception
7.	Lack of alternate indication	7.	Mental shortcuts (biases)
8.	Personality conflicts	8.	Limited short term memory

#### **Other Analysis Types**

0 10 5 11 1 1	
Support/Refuting Analysis	Failure Modes & Effects Analysis
Kepner-Tregoe Analysis	Tap Root analysis
Process Analysis	Management Oversight and Risk Tree (M.O.R.T.)
Task Analysis	Fault Tree Analysis
Change Analysis	Comparative Time Line

#### **CORRECTIVE ACTIONS**

Measures taken to correct an adverse condition and to minimize the potential for recurrence of the condition. Corrective Actions alleviate symptoms of a problem or to eliminate or diminish causes of problems. They generally have to change design or behavior.

Corrective Actions should always be SMART. If the incident resulted in severe consequences, then the Corrective Action should be SMARTS:

- **S**pecific do you know exactly what you expect, would a reasonable reviewer arrive at the same expectation, can you determine that you are done?
- Measurable is there a number, a level of quality, an object or analysis that you can point to?
- Achievable is 100% error- free performance achievable?
- Realistic does it place undue stress on the organization, would it pass a cost benefit test, are the corrective actions within the capability of the organization to implement, does it allow the organization to continue to meet its primary objective of safe, reliable, clean, efficient power generation?
- <u>Timely</u> does it consider the next threat, does it consider the risk associated with nonperformance?
- <u>S</u>ustainable is it captured programmatically, can it be easily removed or undone, will you be able to tell it is still there in two years?

Corrective Actions within the CA Matrix addresses four (4) aspects:

- Restores the condition
- Addresses immediate & interim actions until final actions are put in place
- Prevents or mitigates the cause
- Addresses Extent of Condition

Corrective Actions shall have and owner and a due date.

Corrective Actions have a range of effectiveness

		-
Most effective Design to minimize energy		Low human interaction
	Physical barriers/safety device	
	Warning device, signs & signals	
	Protective procedures	
	Training	
	Tailboards	
	Email communication	
Least effective	Accept the risk	High human interaction

#### **DEFINITIONS**

The reason for an Equipment Failure or Undesired Result based on available evidence and facts. If corrected, then an apparent cause should reduce the probability of repeating the same or similar events, incident or problems.  Apparent causes are not discussed in or part of Root Cause Evaluations.  Is an item that reduces or is intended to reduce the adverse impact of a threat or	
<ul> <li>hazard on a target. Four elements:</li> <li>Effective barrier: Is a barrier that was in place to protect the object.</li> <li>Missing barrier: Is a barrier that was not in place to protect the object.</li> <li>Weak barrier: Is a barrier whose effectiveness is compromised to one extent or another through poor design, degradation, and misapplication for the object it is protecting.</li> <li>Ineffective barrier: Is a barrier that did not work to provide protection from the object it is protecting.</li> </ul>	
An action assigned as part of an issue that is not a corrective action, corrective action to prevent recurrence, or effectiveness review.	
A cause contributing to an event or problem or making the event or problem more difficult to detect, but one that singularly by its elimination would not have prevented the event or problem.	
Measures taken to correct an adverse condition and to minimize the potential for recurrence of the condition. Measures taken to alleviate symptoms of a problem or incident to eliminate or diminish causes of problems.	
The CPUC defines reportable injuries as those that meet any of the following criteria:  • Fatality or personal injury rising to the level of in-patient hospitalization;  • Are the subject of significant public attention or media coverage; or  • Damage to property of the utility or others estimated to exceed \$50,000 and are attributable or allegedly attributable to utility owned facilities.	
(Days Away, Restrictions and Transfers) An injury resulting in lost time, restricted duties, or transfer of the employee.	
The immediate reason of an event, accident or an injury.	
<ul> <li>During the course of transportation in commerce (including loading, unloading, and temporary storage) as a direct result of a hazardous material: <ul> <li>A person is killed.</li> <li>A person receives an injury requiring admittance to a hospital.</li> <li>The general public is evacuated for a one hour or more.</li> <li>A major transportation artery or facility is closed or shut down for one hour or more or the operational flight pattern or routine of an aircraft is altered.</li> <li>Fire, breakage, spillage, or suspected radioactive contamination occurs involving a radioactive material.</li> <li>Fire, breakage, spillage, or suspected contamination occurs involving an infectious substance other than a diagnostic specimen or regulated medical waste.</li> <li>A release of a marine pollutant in a quantity exceeding 450 L (119 gallons) for liquids or 400 kg (882 pounds) for solids; or a situation exists</li> </ul> </li></ul>	

	of such a nature (e.g., a continuing danger to life exists at the scene of the incident) that, in the judgment of the person in passion of the hazardous material, it should be reported to the National Response Center even though it does not meet these criteria.  An unintentional release of a hazardous material from a package (including a tank) or any quantity of hazardous waste that has been discharged during transportation.
Equipment Failure (EF):	An equipment malfunction or cessation of normal operation that results in an unintended condition.
Extent of Condition	The extent to which the problem identified currently exits or is at risk of
(EOCo):	experiencing the same or similar consequences as the event or problem being evaluated.
First Aid Incident:	Can be described as an injury, illness or incident requiring medical attention that is usually administered immediately after the injury occurs and at the location where it occurred, and often consists of a one-time, short-term treatment and requires little technology or training to administer. First aid can include cleaning minor cuts, scrapes, or scratches; treating a minor burn; applying bandages and dressings; the use of non-prescription medicine; and drinking fluids to relieve heat stress.
Hazardous Material Release:	Any incident involving a release of potentially hazardous material and/or unauthorized substance into the air, ground, storm drain, waterways, etc., or any action that violates Federal, State, or local environmental laws and regulations and results in an actual or potential regulatory response. Any release that requires reporting to any Federal and/or State agency is considered an environmental incident. The reporting requirement applies only to incidents that occur in the course of performing authorized contracted work and/or services on behalf of SCE.
Immediate Action:	An action taken immediately upon discovery of an event or problem to make the situation safe.
Interim Action:	A temporary action taken between the time a problem or incident is discovered and when the final actions are complete to prevent or mitigate the effects of the problem, and/or minimize the probability of a repeat problem.
Life Altering Incidents:	Injury, illness or fatality occurring in a place of employment, or in connection with employment, requiring immediate life-preserving rescue action, that if not applied in an immediate fashion, would likely result in the death of that person. These cases usually require the intervention of emergency response personnel to provide life-saving support. Some common examples would include significant blood loss, damage to the brain or spinal cord, use of CPR or AED, chest or abdominal trauma affecting vital organs, and serious burns (3rd degree over a major portion of the body).
Life Threatening Incidents:	Injury, illness or fatality occurring in a place of employment, or in connection with employment, resulting in a permanent and significant loss of a major body part or organ function; permanently changes or disables normal life activity; or requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation. Some examples include significant head injuries, spinal cord injuries, paralysis, major amputations, catastrophic fractured bones, and serious burns (highly visible such as to the face or neck).
Minor Injury/Illness:	Injury, illness or incident that is not Life Threatening or altering but requires more attention than just First Aid.

Potential Life Threatening or Altering Incidents:	An injury or illness or possible injury/illness that is more likely to occur than NOT to occur had the circumstances been different. A potential incident would violate one of the "Rules That Will Keep You Alive", but does not include an accident on a public street or highway, psychological stress, event where noise exposure is sole stressor, slip/trip/fall at ground level, or physical over-exertion (sprain/strain).
OSHA-Recordable Injury:	(Occupational Safety and Health Administration) Work-related injuries and illnesses (including lost time injuries) that result in loss of consciousness, restricted duty, job transfer, medical treatment beyond first aid, fatality or a significant injury or illness diagnosed by a physician or other licensed health care professional.
Problem:	An event, incident, failure, deficiency, or trend involving equipment, human performance, or programs contrary to good business practices or regulatory requirements.
Property Damage Incident:	Any incident involving loss and/or damage to SCE owned or non-SCE owned property. The reporting requirement applies only to incidents that occur in the course of performing authorized contracted work and/or services on behalf of SCE.
Root Cause:	The most fundamental reason for an event or problem and, if eliminated or controlled, will prevent recurrence of the event or problem and similar events or Problems
SCE	Southern California Edison
Serious Injury:	Any injury or illness (including death) occurring in a place of employment or in connection with any employment which requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation or in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement.
Undesired Actions/Conditions (UA/C):	An action taken, or action NOT taken, that results in an unintended condition, nonconformance, or noncompliance.
Operating Experience (OE):	Data sets that include examples of company and industry events and lesson learned.

EHS Handbook for Contractors

### Attachment C: Handbook for Contractors Checklist



The purpose of the Handbook for Contractors Checklist is to provide an outline of Contractor requirements contained in the EHS Handbook for Contractors that the Tier 1 and Tier 2 Edison Representative is to review with the Contractor Representative prior to the start of work.

Project	Name:				Edison Representative:			
Purchas	se Order #:				Project Location:			
	ited Start and tion Dates:	Click or enter a		Click or tap to enter a date.	Contractor Company:			
		Name				Name		
Contractor Representative:		Phone			Contractor's Safety Professional:	Phone		
		Email				Email		
Scope o	f the Project:				1		Check if Source Contract Work:	
	Introduction The pu SCE's Safety Princip Contra General Exp Applica	rpose of Environment Performations of Operations ability stations for top Work Response orting	the Harnental, Hance Poperation ty Stand	Contractors:  Indbook for Contractors  Health, and Safe  Jlicy  Jard  Jard  and Tier 2 Contraction and Insp	ety Policy tractors	ork on the	following requirement	ts
	Environmental Requirements							
	ork – Review ndbook for Co			eement for Tie	r 1 work only on the follow	ing requir	ements contained in t	he
				gram Review of	Tier 1 Contractors/Subcontr	actors		
	Expectations for Tier 1 Contractors							
	General Exp Superv Safety CSQAI New E	ectations visor in Cl professio Rs Coope mployee	for Tier harge R onal for eration I Oversig	1 Contractors Requirement 50 Employees I Requirement the Requirement the Requirement	·			

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Use of Subcontractors to Perform Tier 1 Work

	<ul><li>Ha</li><li>Pro</li></ul>	or Orientation for Tier 1 Contractors zard Assessment oject/Site-Specific EHS Plan ndbook for Contractors Checklist								
	JHA Red	uirement at Active Construction Sites								
	General	al Health and Safety Requirements								
	Confined	ned Space Entry								
	Fall Prot	otection								
	Fire Prev	evention								
	Hazard (	d Communication								
	Heat Illne	Illness Prevention								
	Hot Worl	ot Work								
	Houseke	Housekeeping Cleanup								
	Industrial Hygiene      Asbestos     Lead     Noise     Non-lonizing Radiation Except EMF     Potential Radio Frequency Energy Exposures at SCE Facilities									
	Lockout/	Tagout								
	Trenching and Excavations									
	Use and	Use and Operation of SCE Facilities, Materials, Equipment, and Vehicles								
	Work Are	Nork Area Protection and Traffic Control								
	High Vol	h Voltage Work								
	ok for Cor	cument, the <b>Contractor Representative</b> affirms that he or she und stractors Checklist and will ensure compliance with the requirement								
Contrac Represe	ctor entative	Printed Name:	Date:	Click or tap to enter a date.						
		Signature:								
By signing this document, the <b>Edison Representative</b> affirms that he or she has reviewed this document with the Contractor Representative.										
Edison Represe	entative	Printed Name: Signature:	Date:	Click or tap to enter a date.						

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