

June 30, 2023

Fadi Daye, P.E. Program & Project Supervisor Electric and Safety Reliability Branch Safety and Enforcement Division California Public Utilities Commission 320 West 4th St., Ste. 500 Los Angeles, California 90013

Southern California Edison's 2022 General Order 174 Inspection Program Summary

Dear Mr. Daye:

Attached is a copy of Southern California Edison's Substation Inspection Program. Also enclosed is the General Order 174 Summary Report summarizing completed and past due inspections for 2022.

If you have any questions, please give me a call.

Joel Karzen

Senior Manager, T&D Compliance Integration

1 Innovation Way. Pomona, CA 91768

Enclosures:

Southern California Edison's: Substation Inspection Program General Order 174 Summary Report



2022 General Order 174 Report

Inspection Type	Completed*	Past Due*	Notes
GO 174 Substation Inspection	4,752	0	

^{*}Completed - Actual number of GO 174 inspections performed for the reporting period. Does not include outstanding inspections from prior reporting periods.

^{*}Past Due - The number of GO 174 inspections not performed for the reporting period. Does not include outstanding inspections from prior reporting periods.



Transmission & Distribution Business Unit	GO 174	Version #	11
Substation Inspection Practices		Effective Date	6/30/2023

Southern California Edison Company

GO 174 Substation Inspection Practices

T&D Business Line	Signature	Annual Review Date
Compliance Integration	2	6/30/2023
Senior Manager	Joel Karzen	



Transmission & Distribution Business Unit	GO 174	Version #	11
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1.0 INTRODUCTION

This document describes the Practices employed by the Southern California Edison Company (SCE) for the inspection of substations.

2.0 PURPOSE

The intent of these Practices is to help ensure the safe delivery of reliable power in a costeffective manner and compliance with applicable regulatory requirements.

These Practices are based in part upon internal system knowledge, experience, and expertise, as well as accepted Good Utility Practice, and takes into consideration competing influences, such as operating protocols and emergency conditions.

3.0 APPLICABILITY

Facilities subject to the California Independent System Operator's operational control and/or subject to FERC reliability standards and Customer Substations are exempt from General Order 174 and these Practices.

4.0 DEFINITION OF TERMS

4.1. Annual

A calendar year.

4.2. Discrepancy

A condition that does not conform to regulatory requirements, SCE's inspection standards or operational requirements.

4.3. Good Utility Practice

Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts, which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practices is not intended to be any one of a number of optimum practices, methods, or acts to the exclusion of all others, but rather acceptable practices, methods, or acts generally in practice in the region.

4.4. Inspection

A basic visual evaluation of substation facilities for the purpose of identifying discrepancies.

4.5. Station Log

A business record of events occurring within a Station.

4.6. Substation/Station

The secured site or location containing facilities uniquely located and under the control of qualified SCE employees, through which energy is passed for the purpose of switching and/or transformation.

4.7. Customer Substation:

A substation that functions as the main source of electric power supply for a single customer, including those that provide feed through for additional customers.

Customer substations are not subject to the reporting requirements in section 6.1.5.

4.8. Operator

The person qualified by reason of training, experience, and instruction, responsible for inspecting substations.

4.9. Work Management System (WMS)

The interactive database(s) used to collect inspection data.

5.0 RESPONSIBILITIES

5.1. Transmission and Distribution (T&D)

5.1.1. Grid Operations

Responsible for the 24-hour operation of the electric system and substation inspection.

5.2. Generation

Responsible for the inspection of substation facilities in and around generating stations as well as certain substations in remote locations through agreement with Transmission & Distribution (T&D).

6.0 PRACTICES

6.1. Inspection

6.1.1. Scheduled

Each substation should be inspected by an operator based on the intervals listed in Attachment A for that particular substation. The inspection intervals are based in part upon internal system knowledge, experience and expertise, as well as accepted Good Utility Practice. EXCEPTION: Fewer inspections than specified in Attachment A may be conducted due to reasonable circumstances such as extreme weather (e.g., snow), no access, or system emergencies (e.g., fires, storms, etc.) preventing such inspections from being conducted.

When the operator enters an unattended station, an entry should be made in the station logbook. Note: Manned substations do not contain logbooks. Identified discrepancies that require immediate action are communicated to the appropriate supervisor. The remaining discrepancies found during inspections are noted on the electronic inspection forms. Responsible supervisors review identified discrepancies and assign a priority rating.

6.1.2. Unscheduled

Unscheduled inspections may also be performed during routine operational activities such as switching, or in response to storms, fires, or other events. The performance of an unscheduled inspection is not typically documented except for entries made in the substation logbook and any discrepancies discovered and entered in the WMS.

6.1.3. Facilities

Facilities include: Batteries; Buses; Capacitor Banks; Circuit Breakers; Fire Detection/Suppression (where applicable); Grounding; Insulators/Bushings/Arresters; Perimeter Fencing and Gates; Reactors; Structures; Transformers; Voltage Regulators.

6.1.4. Record Keeping

Records include the following information: Inspector name or identifier; inspection date; and a brief description of identified discrepancies. Inspection records are retained for not less than five (5) years.

6.1.5. External Reporting

Upon request, records and documents are transmitted to Asset Analytics to facilitate required reporting. No later than July 1st of each year, Compliance Integration (CI) transmits to the Safety and Enforcement Division (SED) a report summarizing completed and past due Inspections for the prior calendar year.

Changes to these Practices are noted in the Inspection Program Summary, including the effective date of the change. The report includes any changes made to the Program since the previous report.

6.1.6. External Audits

T&D CI coordinates and leads external compliance audits and serves as a regulatory interface with SED staff.

7.0 REVISONS

Section	Subsection	Description	Date
5.0	5.1	Revision of inspection requirements language and provisions.	6/11/2014
5.0	5.1	Revision of inspection requirements language and provisions.	7/1/2015
5.0	5.1.5 5.1.6	Changed RPPM to MPR, to reflect current name of group	7/1/2015
5.0	5.1.1	Revisions to logbook entries for manned substations	7/1/2016
Attachment A		Updated Substation List, to include new substations	6/27/2017
3.0		Added section 3.0 Applicability.	6/27/18
4.0	4.6.1	Corrected section reference	6/27/18
Attachment A		Updated Substation List, to include new substations and remove out of service stations	6/27/18
Attachment A		Updated Substation List, to include new substations.	6/27/2019
5.1		Moved Grid Operations under section 5.1 and created a sub-section 5.1.1 since this business unit is under the T&D organization.	6/27/2019
5.2		Changed Generation Business Unit and Power Production Division (PPD) to Generation to reflect current name of group.	6/27/2019
6		Minor edits for added clarity.	6/27/2019
Attachment A		Updated Substation List, to include new substations and remove out of service substations	06/26/2020
Attachment A		Updated Substation List, to include new substations and remove out of service substations	06/29/2021
Attachment A		Updated Substation List, to include new substations, remove out of service substations, and removed stations that do not meet the definition of a substation in GO 174.	6/28/2022

Attachment A Updated Substation List, to include new substations and remove out of service substations.	6/30/2023
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ATTACHMENT A

Bi-Monthly Substation Inspections

The following substations should be inspected bi-monthly (every other month), but at a minimum five (5) times annually:

ACTON	BAIN	BOWL	CANWIND	CLARK
AEROJET	BAKER	BOXWOOD	CANYON	CLEARGEN
AIR PRODUCTS	BANDINI	BRADBURY	CANYON LAKE	CLEMENTINE
ALDER	BANDUCCI	BREA	CAPITAN	COFFEE
ALESSANDRO	BANNING	BREEZE	CAPSULE	COLEGIO
ALHAMBRA	BANWIND	BREW	CAPTIVE	COLLEGE
ALISA	BARSTOW	BREWSTER	CAPWIND	COLONIA
ALON	BASSETT	BRIDGE	CARBOGEN	COLORADO
ALTWIND	BASTA	BRIDGEPORT	CARBONIC	COLOSSUS
AMADOR	BAYSIDE	BRIGHTON	CARDIFF	COLTON
AMALIA	BEAUMONT	BROADWAY	CARMENITA	COLUMBINE
AMARGO	BEDFORD	BROOKHURST	CARNIVAL	COMPRESS
AMBOY	BELDING	BROWNING	CARODEAN	COMPTON
AMCO	BELMONT	BRYAN	CAROLINA	CONCHO
AMERON	BELVEDERE	BRYMAN	CARPINTERIA	CONVERSE FLATS
ANAVERDE	BEVERLY	BUCKWIND	CARSON	CORNERS
ANITA	BICKNELL	BULLIS	CASA DIABLO	CORNUTA
APL	BISHOP CREEK NO.2	BUNKER	CASITAS	CORONA
APOLLO	BISHOP CREEK NO.3	BURNT MILL	CEDARWOOD	CORRECTION
APPLE VALLEY	BISHOP CREEK NO.4	BURRIS PIT	CERTIFIED	CORTEZ
AQUEDUCT	BISHOP CREEK NO.5	CABAZON	CHANNEL ISLANDS	CORUM
ARBORS	BISHOP CREEK NO.6	CABRILLO	CHARMIN	COSMIC
ARBWIND	BIXBY	CADY	CHASE	COSO
ARCADIA	BLACK MOUNTAIN	CAJALCO	CHATHAM	COSTA MESA
ARCHIBALD	BLAST	CAL CEMENT	CHATSWORTH	COTTONWOOD
ARCHLINE	BLISS	CALCITY	CHERRY	COYGEN
ARCO	BLOOMINGTON	CALDEN	CHESTNUT	CRATER
ARRO	BLUFF COVE	CALECTRIC	CHEVCENTRAL	CREST
ARROWHEAD	BLYTHE CITY	CAMARILLO	CHEVGEN	CROWN
ARROYO	BOLSA	CAMDEN	CHEVMAIN	CRYCO
ASTRO	BOOST	CAMERON	CHIP	CUCAMONGA
ATHENS	BOREL	CAMGEN	CHIQUITA	CUDAHY
ATWOOD	BORREGO	CAMINO	CIMGEN	CULVER
AULD	BOTTLE	CAMP 10	CITRUS	CUMMINGS
AZUSA	BOVINE	CANTIL	CLAREMONT	CYBER

CYPRESS	EISENHOWER	FUEL	GREENING	INDIAN WELLS
DAIRYMANS	EL SOBRANTE	FULLERTON	GROWERS	INDIGO
DAISY	ELCANS	GAGE	HAAGEN	INDUSTRY
DALTON	ELIZABETH LAKE	GALAXY	HAMILTON	INGLEWOOD
DATABANK	ELLWOOD	GALE	HANFORD	INJECTION
DECLEZ	ELSINORE	GALLATIN	HANJIN	INLAND
DEEP SPRINGS	ELY	GANESHA	HARVARD	INYOKERN TOWN
DEFRAIN	ENWIND	GARFIELD	HASKELL	IRON MT. SCE
DEL MAR	ERIC	GARNET	HATHAWAY	IRVINE
DEL ROSA	ESTERO	GARVEY	HAVASU	ISABELLA
DEL SUR	ESTRELLA	GATX	HAVEDA	ISLA VISTA
DELANO	EUCLID	GAVILAN	HAVILAH	IVAR
DESAL	FAIR OAKS	GAVIOTA	HEDDA	IVYGLEN
DESERT OUTPOST	FAIRFAX	GENAMIC	HELENDALE	JEFFERSON
DIAMOND BAR	FAIRVIEW	GENE	HELIJET	JERSEY
DIEMER	FALCON RIDGE	GEORGE A.F.B.	HEMET	JOSE
DIKE	FARRELL	GETTY	HESPERIA	JOSHUA TREE
DITMAR	FEDERALGEN	GILBERT	HI DESERT	JUNCTION
DOCK	FELTON	GISLER	HIGHGROVE	JUNE LAKE
DOHENY	FERNWOOD	GLEN AVON	HIGHLAND	KARMA
DOMHILL	FIBRE	GLEN IVY	HILLGEN	KAWEAH 1
DOUGLAS	FILLMORE	GLENNVILLE	HINKLEY	KAWEAH 2
DOUGOIL	FINANCE	GLOW	HOLGATE	KAWEAH 3
DOWNEY	FIREHOUSE	GOLDHILL	HOLIDAY	KAWGEN
DOWNEY MED	FISH LAKE VALLEY	GOLDSTONE	HOLLYWOOD PARK	KEM
DOWNS	FLORADAY	GOLDTOWN	HOMART	KERN RIVER 1
DUARTE	FLOWIND	GONZALES	HOPEFUL	KERN RIVER 3
DUNES	FOGARTY	GORMAN	HOWARD	KERNVILLE
DUNN SIDING	FOREST HOME	GOSHEN	НОҮТ	KERRGEN
DUTCHWIND	FORGE	GRAHAM	HUGHESAIR	KIMBALL
EARLIMART	FORT IRWIN	GRANADA	HUGHTRON	KINDER
EAST BARSTOW	FRANCIS	GRAND CROSSING	HUNTINGTON PARK	KIRKWALL
EATON	FRAZIER PARK	GRAPELAND	HUSTON	KIWI
EDINGER	FREMONT	GREAT LAKES	ICEGEN	LA CANADA
EDWARDS	FRUITLAND	GREENHORN	IMPERIAL	LA HABRA

LA MIRADA	LOS CERRITOS	MODENA	NIETOS	PALM SPRINGS
LA PALMA	LOSULFUR	MODOC	NIGUEL	PALM VILLAGE
LA VETA	LOURICH	MONETA	NOGALES	PALMDALE
LAFAYETTE	LUCAS	MONOLITH	NOLA	PALOS VERDES
LAKEVIEW	LUCERNE	MONROVIA	NORSEAL	PAN AERO
LAKEWOOD	LUNADA	MONTECITO	NORTH INTAKE	PARKWOOD
LAMPSON	LUNDY	MOOG	NORTH MUROC	PASSONS
LANCASTER	LYNWOOD	MORAGA	NORTH OAKS	PAUBA
LANDING	MACARTHUR	MORENO	NORTHROP	PEARL
LANPRI	MACNEIL	MORNINGSIDE	NORTHWIND	PEBBLY BEACH
LARK ELLEN	MADRID	MORRO	NUGGET	PECHANGA
LAS LOMAS	MAGMAGEN	MORWIND	OAK GROVE	PEDLEY
LATIGO	MALIBU	MOULTON	OAK PARK	PEERLESS
LAUREL	MANHATTAN	MOUNTAIN PASS	OAKWIND	PEPPER
LAWNDALE	MARASCHINO	MOUNTWIND	OASIS	PEREZ
LAYFAIR	MARINE	MOVAL	OCEAN PARK	PERRY
LEATHERNECK	MARION	MOVIE	OCEANVIEW	PEYTON
LEE VINING	MARIPOSA	MT. TOM	OCTOL	PHARMACY
LEHMAN	MARYMOUNT	MT. VERNON	OJAI	PHELAN
LEMON COVE	MASCOT	MURPHY	OLDFIELD	PICO
LENNOX	MAXWELL	MURRIETTA 2	OLIVE LAKE	PIER
LEVY	MAYBERRY	MUSCOY	OLYMPIC	PIERPONT
LIBERTY	MAYFLOWER	NAOMI	ONEILL	PIONEER
LIMESTONE	MCGRATH	NAPLES	ONSHORE	PIPE
LINDE	MENTONE	NAROD	ONTARIO	PITCHGEN
LINDEN	MERCED	NARROWS	ORANGE	PITMAN
LINDSAY	METALCAN	NATURAL	ORCOGEN	PIUTE
LINE CREEK	MICHILLINDA	NAVY MOLE	ORCOSAN	PIXLEY
LIQUID	MIDWIND	NELSON	ORDWAY	PLACENTIA
LITTLE ROCK	MILITARY	NEPTUNE	ORO GRANDE	PLASTIC
LIVE OAK	MILLIKEN	NEWBURY	ORTEGA	PLAYA
LOCKHEED	MINARET	NEWCOMB	OUTFALL	PLUESS
LOCUST	MINNEOLA	NEWHALL	OXGEN	POLARIS
LONGDON	MISSILE	NEWMARK	PACLINE	POLYPRO
LORAINE	MOBILOIL	NIAGARA	PALM CANYON	POMONA

POOLE	REVITAL	SANTA BARBARA	SIGNAL HILL	STUDIO
POPLAR	RIALTO	SANTA FE SPRINGS	SILVER SPUR	SULLIVAN
PORTAL	RIDGECREST	SANTA MONICA	SIMPSON PAPER	SUN CITY
PORTERVILLE	RINDGE	SANTA ROSA	SIXTEENTH STREET	SUNNY DUNES
POTRERO	RINGMILL	SANTA SUSANA	SKILAND	SUNNYHILLS
PROCAL	RIPLEY	SANTEE	SKINWATER	SUNNYSIDE
PROCESS	RITEAID	SANWIND	SKYLARK	SUNSHINE
PROCGEN	RITTER RANCH	SATICOY	SLATER	TAHITI
PROCTOR	RIVERA	SAUGUS	SMILEY	TALBERT
PROTEIN	RIVERTEX	SAVAGE	soco	TAMARISK
PUENTE	RIVERWAY	SAWTELLE	SOLEMINT	TANKER
PUREWATER	ROCKAIR	SEABRIGHT	SOMERSET	TAPIA
PURIFY	ROCKET TEST	SEARLES	SOMIS	TAYSHELL
QUARTZ HILL	ROLLING HILLS	SEAWIND	SONY	TEAM
QUINN	ROSAMOND	SECOND AVENUE	SOPIPE	TELEGRAPH
RAILROAD	ROSECRANS	SEGS 2	SOPORT	TEMPLE
RALPHS	ROSEMEAD	SEGS 3	SOQUEL	TENAJA
RAMONA	ROYAL	SEGS 4	SOUTH GATE	TENGEN
RANCHO	RUBIDOUX	SEGS 5	SOUTHBASE	TENNESSEE
RANDALL	RUNNING SPRINGS	SEGS 6	SOUTHCAP	TERRA BELLA
RANDOLPH	RUSH	SEGS 7	SOUTHDOWN	TERRACE
RANDSBURG	RUSH CREEK	SEPULVEDA	SOUTHWIND	THORNHILL
RAVENDALE	SAFARI	SERRFGEN	SPACE	THOUSAND OAKS
RECLAIM	SAN ANTONIO	SERVER	SPARKLE	THREE RIVERS
RECOVERY	SAN DIMAS	SHANDIN	SPONGE	THRIVE
RECTIFIER	SAN FERNANDO	SHAWNEE	STADIUM	THRUST
REDLANDS	SAN GABRIEL	SHELLSOM	STADLER	THUMS ISLAND A-ISLAND GRISSOM
REDMAN	SAN MANUEL	SHELLWATT	STANHILL	THUMS ISLAND B-ISLAND WHITE
REDONDO	SAN MARCOS	SHERWIN	STATE STREET	THUMS ISLAND C-ISLAND CHAFFEE
PEDLICTION	SAN MARINO	SHIP	STENT	THUMS ISLAND D-ISLAND FREEMAN
REDUCTION REFINERY	SAN MARINO	SHRED		
	SAN MIGUEL		STETSON	TIDELANDS
REFUSE	SAN VICENTE	SHULTZ	STEVEDORE	TIEFORT
RENO	SANIGEN	SHUTTLE	STEWART	TIFFANYWIND
RENWIND	SANTA ANA RIVER 1	SIERRA MADRE	STODDARD	TIMBERWINE
REPETTO	SANTA ANA RIVER 3	SIGGEN	STRATHMORE	TIMOTEO

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TIPPECANOE	WALTERIA			
TIPTON	WASHINGTON			
TITANS	WASTEWATER			
TOPAZ	WATSON			
TORRANCE	WAVE			
TORREY	WEBMET			
TORTOISE	WELDON			
ТОУОТА	WELLGEN			
TRANSWIND	WESBASIN			
TRASK	WEST BARSTOW			
TRITON	WEST RIVERSIDE			
TRONA	WESTEX			
TROPHY	WESTHILL			
TULARE	WESTPAC			
TWENTYNINE PALMS	WEYMOUTH			
UNIMED	WHARF			
UNIOIL	WHEATLAND			
UNIVERSAL	WHIPPLE			
UNIVERSITY	WHITE MT.			
UPLAND	WHITEWATER			
VAIL	WILLAMETTE			
VALDEZ	WILSONA			
VAPOR	WIMBLEDON			
VEGAS	WINDSOR HILLS			
VENICE HILL	WOODRUFF			
VENIDA	WOODVILLE			
VENWIND	WRIGHTWOOD			
VERA	YERMO			
VERDANT	YORBA LINDA			
VICTORIA	YUCAIPA			
VICTORVILLE	YUCCA			
VISALIA	YUKON			
WABASH	ZACK			
WAKEFIELD	ZANJA			
WALKER BASIN	ZONDWIND			