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July 1, 2022

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Safety and Enforcement Division
California Public Utilities Commission
320 West 4th St., Ste. 500
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Southern California Edison's
2021 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 2021.

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

A handwritten signature in black ink, appearing to be "Joel Karzen", written over a light blue horizontal line.

Joel Karzen
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Pomona, CA 91768

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

2021 General Order 174 Report

Inspection Type	Completed*	Past Due*	Notes
GO 174 Substation Inspection	4,780	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 #	10
Substation Inspection Practices		Effective Date	6/28/2022

Southern California Edison Company

GO 174 Substation Inspection Practices

T&D Business Line	Signature	Annual Review Date
Compliance Integration Senior Manager	 Joel Karzen	6/28/2022

July 2022

Transmission & Distribution Business Unit	GO 174	Version #	10
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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 cost-effective 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 Maintenance and Inspection (M&I) Analytics Performance 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 REVISIONS

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

Bi-Monthly Substation Inspections

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

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

CUMMINGS	EDINGER	FREMONT	GREAT LAKES	ICEGEN
CYBER	EDWARDS	FRUITLAND	GREENHORN	IMPERIAL
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	HOYT	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

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

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

TIFFANYWIND	WABASH	ZACK		
TIMBERWINE	WAKEFIELD	ZANJA		
TIMOTEO	WALKER BASIN	ZONDWIND		
TIPPECANOE	WALTERIA			
TIPTON	WASHINGTON			
TITANS	WASTEWATER			
TOPAZ	WATSON			
TORRANCE	WAVE			
TORREY	WEBMET			
TORTOISE	WELDON			
TOYOTA	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			