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July 1, 2021

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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
2020 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 2020.

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 gray rectangular background.

Joel Karzen
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Pomona, CA 91768

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

2020 General Order 174 Report

Inspection Type	Completed*	Past Due*	Notes
GO 174 Substation Inspection	4,940	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 #	9
Substation Inspection Practices		Effective Date	6/29/2021

Southern California Edison Company

GO 174 Substation Inspection Practices

T&D Business Line	Signature	Annual Review Date
Compliance Integration Senior Manager	 Joel Karzen	6/9/2021

July 2020

Transmission & Distribution Business Unit	GO 174	Version #	9
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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 this General Order.

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: Less inspections than specified in Attachment A may be conducted if limited due to reasonable circumstances such as extreme weather (e.g. snow), no access, or system emergencies (e.g. fires, storms, etc.) prevent 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 log book 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

Bi-Monthly Substation Inspections

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

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

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

KIRKWALL	LOCKHEED	MILL CREEK 3	NEPTUNE	ORCOGEN
KIWI	LOCUST	MILLIKEN	NEWBURY	ORCOSAN
LA CANADA	LONGDON	MINARET	NEWCOMB	ORDWAY
LA HABRA	LORAINE	MINNEOLA	NEWHALL	ORO GRANDE
LA MIRADA	LOS CERRITOS	MISSILE	NEWMARK	ORTEGA
LA PALMA	LOSULFUR	MOBILOIL	NIAGARA	OUTFALL
LA VETA	LOURICH	MODENA	NIETOS	OXGEN
LAFAYETTE	LUCAS	MODOC	NIGUEL	PACLINE
LAKEVIEW	LUCERNE	MONETA	NOGALES	PALM CANYON
LAKEWOOD	LUNADA	MONOLITH	NOLA	PALM SPRINGS
LAMPSON	LUNDY	MONROVIA	NORSEAL	PALM VILLAGE
LANCASTER	LYNWOOD	MONTECITO	NORTH INTAKE	PALMDALE
LANDING	LYTLE CREEK P.H.	MOOG	NORTH MUROC	PALOS VERDES
LANPRI	MACARTHUR	MORAGA	NORTH OAKS	PAN AERO
LARK ELLEN	MACNEIL	MORENO	NORTHROP	PANDOL
LAS LOMAS	MADRID	MORNINGSIDE	NORTHWIND	PAPER
LATIGO	MAGMAGEN	MORRO	NORWELD	PARKWOOD
LAUREL	MALIBU	MORWIND	NUGGET	PASSONS
LAWNDALE	MANHATTAN	MOULTON	OAK GROVE	PAUBA
LAYFAIR	MARASCHINO	MOUNTAIN PASS	OAK PARK	PAULARINO
LEATHERNECK	MARINE	MOUNTWIND	OAKWIND	PEARL
LEE VINING	MARION	MOVAL	OASIS	PEBBLY BEACH
LEHMAN	MARIPOSA	MOVIE	OCEAN PARK	PECHANGA
LEMON COVE	MARYMOUNT	MT. TOM	OCEANVIEW	PEDLEY
LENNOX	MASCOT	MT. VERNON	OCTOL	PEERLESS
LEVY	MAXWELL	MURPHY	OJAI	PEPPER
LIBERTY	MAYBERRY	MURRIETTA 2	OLDFIELD	PEREZ
LIMESTONE	MAYFLOWER	MUSCOY	OLIVE LAKE	PERRY
LINDE	MCGRATH	NAOMI	OLYMPIC	PEYTON
LINDEN	MENTONE	NAPLES	ONEILL	PHARMACY
LINDSAY	MERCED	NAROD	ONSHORE	PHELAN
LINE CREEK	METALCAN	NARROWS	ONTARIO	PICO
LIQUID	MICHILLINDA	NATURAL	ONTARIO PH.1	PIER
LITTLE ROCK	MIDWIND	NAVY MOLE	ONTARIO PH.2	PIERPONT
LIVE OAK	MILITARY	NELSON	ORANGE	PIONEER

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

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