

Laura M. Fulton Senior Counsel 8330 Century Park Court, CP32F San Diego, CA 92123-1548 LFulton@SDGE.com

January 29, 2025

VIA ELECTRONIC FILING

Docket # 2024 NOV

Patrick Doherty
Program Manager, Compliance Assurance Division
Office of Energy Infrastructure Safety
715 P Street, 20th Floor
Sacramento, CA 95814

RE: San Diego Gas & Electric Company's Response to Notice of Violation – NOV_CAD_SDGE_LOK_20241105_1438

Dear Program Manager Doherty:

San Diego Gas & Electric Company (SDG&E) provides this response to the finding identified in the Notice of Violation "NOV_CAD_SDGE_LOK_20241105_1438" (Notice of Violation or NOV) issued by the Office of Energy Infrastructure Safety (Energy Safety) on December 19, 2024 regarding Energy Safety's inspection of work completed by SDG&E in accordance with its 2024 Wildfire Mitigation Plan (WMP). Specifically, the NOV describes that on November 5, 2024, Energy Safety conducted an inspection of SDG&E's WMP initiatives in the vicinity of the city of Bonsall, California and found the following violation:

Violation 1 – Energy Safety observed that in implementing WMP initiative 8.1.2.10.1 Avian Protection Program (WMP.972), SDG&E failed to provide accurate data in reporting that avian protection was installed on Pole ID P611012, Grid Hardening ID 530000338845-P611012 at coordinates 33.29414100199491, -117.20869477988714.

SDG&E is not requesting a written hearing for the findings addressed in this response; however, SDG&E reserves the right to raise these points in subsequent procedural stages and/or proceedings as necessary. Further, although Energy Safety has the right to refer certain notices to the California Public Utilities Commission for enforcement action, the findings in this notice do not merit referral, as there is inadequate support for a finding that SDG&E has failed to substantially comply with its approved WMP. ¹

See Pub. Util. Code §8386.1.

I. SDG&E RESPONSE

A. Violation 1 – Avian Protection, Failure to Provide Accurate Data on P611012.

SDG&E respectfully notes that no violation is present at this pole. Per the SDG&E Overhead Construction Standards, as shown in Attachment A, this pole does not require raptor guards and requires only covered jumper wire, which is a form of avian mitigation. This Standard illustrates the application of covered jumper wire for existing poles in three or four wire construction, specifically in Avian Protection areas, and applies to poles where only a single circuit exists, with dead ends. The as-built for the May 2, 2024 installation of the covered jumper wire for P611012 is also provided in Attachment A.

SDG&E shared these findings in an informal conference with Energy Safety's Compliance Division on January 22, 2025. SDG&E is still waiting for a response from that informal conversation and is submitting this response and attachments in the abundance of caution.

II. CONCLUSION

SDG&E appreciates Energy Safety's continued efforts to identify, communicate, and work together to promote wildfire safety throughout California.

Respectfully submitted,

/s/ Laura M. Fulton
Attorney for
San Diego Gas and Electric Company

See Attachment A (SDG&E Overhead Construction Standards, at Drawing No. OH1654.1).

Attachment A

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H REVISED TO 30 FORMAT ARC JIK J - 06/14/2022 G 1008 - 7073 San Dison Cae and Electric Company All rights received Removal of this convicible notice without permission is not permitted under law	OH1660 MOVED TO FMO	OH1650, OH1651, OH1652, OH1653 MOVED TO FMO	CHANGE	ANIAN PROTECTION - GENERAL ANIAN MORTALITY REPORTING REQUIREMENTS AND PROCEDURES PIN AND INSULATOR COVER-UP DEVICES FOR AVIAN PROTECTION ANIAN COVER-UP PROTECTION AND TRANSFORMER LEAD WIRES LIGHTNING ARRESTER AND CUTOUT COVER-UP DEVICES FOR AVIAN PROTECTION MODIFIED CONSTRUCTION FOR EXISTING POLES AVIAN SAFE CONSTRUCTION CROSSARM CONSTRUCTION - 4-WIRE TANGENT TWO LEVELS - AVIAN SAFE CONSTRUCTION
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APP-5 WITHIN THESE CONSTRUCTION STANDARDS, YOU WILL FIND GUIDANCE FOR THE FOLLOWING: AND CONTAINS THE FOLLOWING: APP-8 APP-7 APP-6 APP-4 APP-2 AREA ANOTHER DOCUMENT, THE "AVIAN PROTECTION PROCEDURES MANUAL" WAS DEVELOPED AS A GUIDE FOR THE OPERATING DISTRICTS APP-9 APP-3 APP-1 THE PLAN INCLUDES THE FOLLOWING: SCOPE: THIS STANDARD REFERENCES THE DESIGNATED AVIAN PROTECTION CRITICAL AREAS AND THOSE STANDARDS AND AVIAN PROTECTION PLAN (APP) CRITICAL AREAS: PROTECT BOTH RAPTORS AND ALL MIGRATORY BIRDS. FOLLOWING THIS PLAN ASSURES THAT SDG&E IS IN COMPLIANCE WITH ITS 50 YEAR ENVIRONMENTAL PERMIT AND FEDERAL LAWS THAT DISTRIBUTION ENGINEERING AND STANDARDS THE APP WAS DEVELOPED IN A PARTNERSHIP BETWEEN THE DEPARTMENTS OF LAND PLANNING AND NATURAL RESOURCES AND ELECTRIC THE SAN DIEGO GAS AND ELECTRIC AVIAN PROTECTION PLAN (APP) WAS APPROVED AND IMPLEMENTED IN JANUARY 2005. POWERLINE PLANNING PERSONNEL TRAINING ENVIRONMENTAL SERVICES EARLY IN DESIGN PROCESS AND INCLUDE AVIANTEAM@SEMPRAUTILITIES.COM IN JOB WALKS TO CROSSARM CONSTRUCTION - 3-WIRE TANGENT AVIAN SAFE CONSTRUCTION AVIAN MORTALITY REPORTING APP CRITICAL AREAS INTRODUCTION PLAN IMPLEMENTATION AND FUTURE MANAGEMENT ACTIONS AVIAN PROTECTION CONSIDERATIONS LIGHTNING ARRESTER AND CUTOUT COVER-UP DEVICES FOR AVIAN PROTECTION TRANSFORMER COVER-UP DEVICES FOR AVIAN PROTECTION PIN AND INSULATOR COVER-UP DEVICES FOR AVIAN PROTECTION MODIFICATION OF EXISTING FACILITIES PROCEDURES FOR NESTING BIRDS PROCEDURES FOR INJURED OR DECEASED BIRDS METHODS OF AVIAN PROTECTION IDENTITY THE SPECIES, NESTING PATTERNS, AND THE OVERHEAD STANDARD THAT CAN BEST MITIGATE ELECTRICAL CONTACTS BANNER, HARRISON PARK, JULIAN, PINE HILLS BALLENA VALLEY, SAN TERESA VALLEY, LAKE SUTHERLAND APP-19 LAKE HENSHAW, PUERTA LA CRUZ, SAN JOSE DEL VALLE, CHIHUAHUA VALLEY, DAMERON VALLEY, MESA GRANDE, MORETTIS JUNCTION PAUMA VALLEY, RINCON SAN DIEGUITO CREEK DEL DIOS, HARMONY GROVE, LAKE HODGES, CAMP PENDLETON DESCRIPTION SANTA YSABEL, WITCH CREEK, WYNOLA SAN YSIDRO VALLEY, VOLCAN MOUNTAIN -NORTHEAST, OAK GROVE VALLEY PUBLICATIONS WHICH PROVIDE GUIDANCE FOR THE APPLICATION OF AVIAN SAFE CONSTRUCTION. REVISED TO 3D FORMAT SCOPE UPDATE CHANGE APP-17 APP-14 APP-12 APP-11 ARC ARC APP-18 APP-16 APP-15 APP-13 APP-10 BOULDER OAKS, CAMERON SPRINGS, CAMPO CORTE MADERA VALLEY, LONG VALLEY BARRETT JUNCTION, BARRETT LAKE, HAUSER CANYON, **DULZURA, ENGINEER SPRINGS** CREST, HARBISON CANYON, SYCUAN INDIAN RESERVATION EL CAPITAN RESERVOIR BARONA MESA, BARONA VALLEY BORREGO VALLEY MESCAL BAJADA, YAQUI MEADOWS, YAQUI PASS GRAPEVINE CANYON, RANCHITA, YAQUI WELLS SAN FELIPE VALLEY, VOLCAN MOUNTAIN - EAST DESCRIPTION PEI ¥ RSL MORENA VILLAGE STRUCTURES MUST COORDINATE WITH SHE GRW KRG APVD 01/15/2019 06/14/2022 04/07/2023 DATE SDGE APP-9 APP-5 APP-2 APP-6 APP-9 APP-23 APP-9 APP-2 APP-16 APP-11 APP-17 APP-15 APP-2 APP-16 APP-29 APP-19 APP-5 APP-24 APP-1 APP-20 APP-22 APP-20 APP-13 APP-25 APP-27 APP-18 APP-18 APP-14 APP-14 APP-9 APP-7 APP-22 APP-17 APP-20 APP-23 APP-26 APP-24 APP-23 LONG VALLEY OTAY MESA, OTAY RIVER VALLEY CARRIZO VALLEY, VALLECITO VALLEY ENGINEER SPRINGS CREST COUSER CANYON CARRIZO VALLEY BORDER FIELD STATE PARK BOULDER PEAK, JACUMBA VALLEY BOULEVARD, LIVE OAK SPRINGS, MANZANITA LIVE OAK SPRINGS HARBISON CANYON GRAPEVINE CANYON EL CAPITAN RESERVOIR DULZURA DAMERON VALLEY CORTE MADERA VALLEY CHIHUAHUA VALLEY CAMERON SPRINGS BOULDER PEAK BORDER FIELD STATE PARK BARRETT JUNCTION BARONA VALLEY MC CAIN VALLEY LAKE HODGES LAKE HENSHAW JACUMBA VALLEY HAUSER CANYON HARMONY GROVE **DEL DIOS** CAMP PENDLETON CAMPO **BOULEVARD BOULDER OAKS** BORREGO VALLEY BEELER CANYON BARRETT LAKE BARONA MESA BANNER BALLENA VALLEY DESCRIPTION BEELER CANYON LAKE SUTHERLAND HARRISON PARK IULIAN DG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS AVIAN PROTECTION - GENERAL APP-6 APP-10 APP-24 APP-16 APP-28 APP-28 APP-6 APP-7 APP-8 APP-30 APP-6 APP-10 APP-2 APP-32 APP-32 APP-3 APP-11 APP-31 APP-31 APP-6 APP-18 APP-9 APP-32 APP-3 APP-3 APP-26 APP-26 APP-5 APP-28 APP-28 APP-4 APP-20 APP-28 APP-12 AREA **APP-32** APP-31 APP-30 APP-29 APP-28 RANCHITA PALA MIRAMAR, PENASQUITOS, ROSE CANYON, SAN PASQUAL SAN PASQUAL SAN CLEMENTE CANYON RINCON RAMONA PUERTA LA CRUZ POTRERO PENASQUITOS OTAY RIVER VALLEY MORETTIS JUNCTION MISSION GORGE MESCAL BAJADA RAMONA, RAMONA GRASSLANDS PALA, COUSER CANYON WITCH CREEK WARNER SPRINGS VOLCAN MOUNTAIN - N/E **VOLCAN MOUNTAIN - EAST** VALLECITO VALLEY SYCUAN INDIAN RESERVATION SYCAMORE CANYON SPRING CANYON SAN YSIDRO VALLEY SAN TERESA VALLEY SANTA YSABEL SAN JOSE DEL VALLE SAN FELIPE VALLEY SAN DIEGUITO CREEK ROSE CANYON RAMONA GRASSLANDS PINE HILLS PAUMA VALLEY OTAY MESA OAK GROVE VALLEY MURPHY CANYON MORENA VILLAGE MIRAMAR DESCRIPTION SAN CLEMENTE CANYON SYCAMORE CANYON - WEST MISSION GORGE, MURPHY CANYON, SPRING CANYON OH1610.1 DRAWING NO: 1 OF 2 SHEET:

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SCOPE: THIS STANDARD OUTLINES THE REQUIREMENT AND PROCEDURE FOR REPORTING ALL AVIAN MORTALITIES.

REPORTING REQUIREMENT

WHEN A DEAD OR INJURED BIRD IS FOUND NEAR OR ON SDG&E EQUIPMENT AND FACILITIES (E.G. POLES, TOWERS, SUBSTATIONS) AN AVIAN MORTALITY REPORT (AMR) WITH DIGITAL PHOTOS MUST BE COMPLETED AND FORWARDED TO THE SDG&E ENVIRONMENTAL PROGRAMS, BIOLOGICAL RESOURCES (EPBR) BIOLOGIST WITHIN 24 HOURS.

REPORTING PROCEDURE

IDENTIFY THE SPECIES IF POSSIBLE, ESPECIALLY TO DETERMINE WHETHER OR NOT THE BIRD IS AN EAGLE. WHENEVER THERE IS DOUBT, CONTACT EPBR FOR GUIDANCE. FOR ALL BIRD MORTALITIES, TAKE A CLOSE-UP DIGITAL PHOTO OF THE BIRD FOR IDENTIFICATION PURPOSES.

ALWAYS INCLUDE A COMMONLY KNOWN OBJECT IN YOUR PHOTO (E.G. PENCIL, LIGHTER, KEYS, ETC.) FOR SIZE REFERENCE.

USE A RULER OR TAPE MEASURE IF THE NUMBERS ARE LARGE ENOUGH TO SHOW IN THE PHOTO. IF A BIRD CARCASS IS DAMAGED BEYOND RECOGNITION, TAKE A CLOSE-UP PHOTO OF BOTH THE TALONS AND THE BEAK. ALWAYS TAKE A PHOTO OF THE TOP OF THE POLE OR STRUCTURE WHERE THE BIRD MADE CONTACT. THIS WILL HELP IDENTIFY WHAT TYPE OF RETROFIT IS NECESSARY TO MAKE THAT STRUCTURE AVIAN SAFE. SEND ALL PHOTOS WITH THE AWR TO THE PRIMARY SDG&E CONTACT(S) WITHIN 24 HOURS. COMPLETE AN AVIAN MORTALITY REPORT FORM. THIS REPORT FORM IS AVAILABLE ON THE ENVIRONMENTAL SERVICES WEBSITE.

CLICK HERE FOR THE FORM AND CONTACT INFORMATION. FILL OUT THE REPORT FORM AS COMPLETELY AS POSSIBLE. SUBMIT THIS REPORT FORM, WITH PHOTOS OF BOTH THE INJURED OR DEAD BIRD, AND THE POLE OR STRUCTURE, TO THE SDG&E EPBR BIOLOGIST WITHIN 24 HOURS AFTER THE CONTACT IS DISCOVERED AND RECORDED.

FOR DISPOSAL INSTRUCTIONS OF ANY DEAD BIRD, CONTACT EPBR. **DO NOT TRANSPORT ANY DEAD BIRDS WITHOUT**

AUTHORIZATION.

INSTALLATION: NONE

BILL OF MATERIALS: NONE

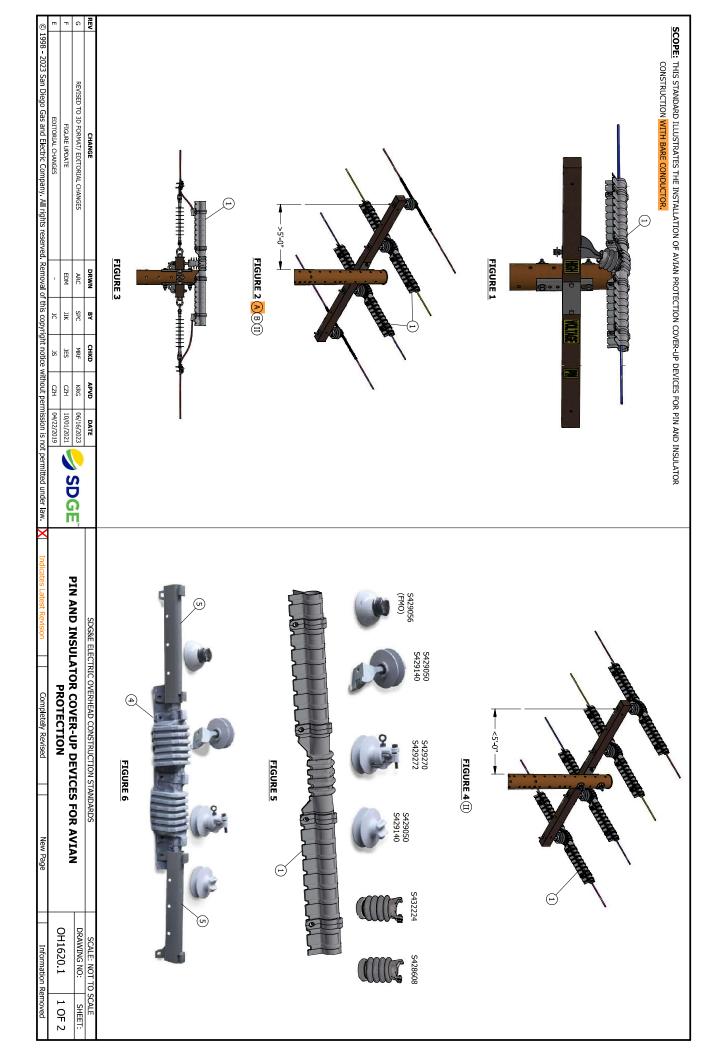
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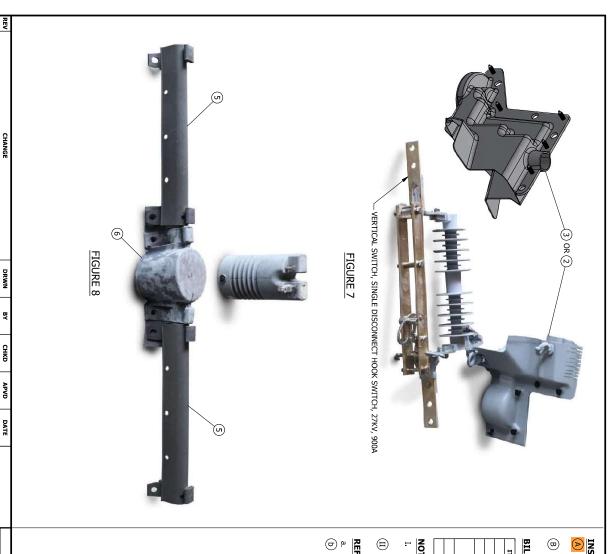
- . IF YOU HAVE ANY QUESTIONS ABOUT THESE REPORTING PROCEDURES, OR, ARE UNSURE ABOUT ANY ACTION THAT YOU MAY NEED TO TAKE CONCERNING AVIAN MORTALITY REPORTING, PLEASE CALL ONE OF THE CONTACTS LISTED IN THIS CONSTRUCTION STANDARD.
- II. IF THE BIRD IS INJURED, OR, YOU OBSERVE THE PRESENCE OF A LEG BAND OR WING MARKER, CONTACT THE SDG&E EPBR BIOLOGIST IMMEDIATELY. EAGLES (INCLUDES GOLDEN, BALD AND OSPREY) EXIST WITHIN SDG&E SERVICE TERRITORY, AND AN EAGLE ELECTROCUTION COULD OCCUR ON OUR LINES OR FACILITIES. ADULT EAGLES RANGE ANYWHERE FROM 30" TO 40" IN LENGTH AND HAS A 78" TO 84" WINGSPAN. IF AN EAGLE IS ELECTROCUTED, EPBR MUST BE CONTACTED IMMEDIATELY AND SPECIAL ARRANGEMENT MUST BE MADE FOR TRANSPORT OF THE BIRD.
- III. IT IS ILLEGAL TO TRANSPORT EAGLES IN THE U.S. CALL THE EPBR BIOLOGIST IMMEDIATELY. YOU WILL BE GIVEN GUIDANCE ON THE NEXT COURSE OF ACTION TO TAKE. DO NOT TRANSPORT ANY EAGLE UNLESS AUTHORIZED BY EPBR

REFERENCE:

- a. THE BALD AND GOLDEN EAGLE PROTECTION ACT (16 U.S.C. 668-668C)
- THE MIGRATORY BIRD TREATY ACT (16 U.S.C. 703-712)
 SDG&E STANDARD PRACTICE 147 "AVIAN MORTALITY RI
- SDG&E STANDARD PRACTICE 147 "AVIAN MORTALITY REPORTING PROCEDURE".

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PIN AND INSULATOR COVER-UP DEVICES FOR AVIAN SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS

PROTECTION

OH1620.2

2 OF 2 SHEET:

SCALE: NOT TO SCALE
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04/22/2019 10/01/2021 06/16/2023

INSTALLATION:

THE REQUIRED MINIMUM DISTANCE OF UNCOVERED CONDUCTOR PHASE-TO-PHASE, PHASE-TO-GROUND OR PHASE-TO-NEUTRAL IS 60 INCHES.

DOUBLE ARMS: WHEN A DOUBLE P/I COVER WILL NOT SUFFICE, TWO SINGLE COVERS MAY BE UTILIZED AND TRIMMED TO FIT.

BILL OF MATERIALS:

ITEM	DESCRIPTION	QUANTITY	STANDARD PAGE	STANDARD PAGE STOCK NUMBER DESIGN UNITS	DESIGN UNITS
1	COVER, TANGENT, SIDE TIE, AVIAN, RAUCKMAN	AS REQ'D		S289672	PIRM
2	COVER, 900A DISCONNECT, CUTOUT STYLE	AS REQ'D	-	S286948	9COCVR
3	COVER, AVIAN, 900A DISCONNECT, CUT OUT STYLE, RAUCKMAN	AS REQ'D	-	S286952	9COCRM
4	PIN AND INSULATOR COVER, DOUBLE 55-3, 55-5, OR 56-1 SIDE TIE, OR	GIOBE SV		COOCEA	DBIVIDI
4	DOUBLE VPI/CLAMP TOP	AS REQU	-	3209034	DBLVF1
ر.	COVER, AVIAN, EXTENSION ARM, FOR RAPTOR COVERS	AS REQ'D		S289660	EXACVR
6	CAPACITOR SENSOR COVER	AS REQ'D		S289606	LCVMI

NOTES:

- I. THESE COVER-UP DEVICES ARE FOR INCIDENTAL WILDLIFE CONTACT ONLY. THEY ARE NOT RATED PERSONAL PROTECTION AND SHOULD BE TREATED AS A BARE WIRE.
- ⊞ CROSSARMS COVER ONLY THE INSIDE CONDUCTORS. ICTION COVER ALL CONDUCTORS ON 10-FOOT CROSSARMS OR LESS, FOR 12-FOOT AND 15-FOOT

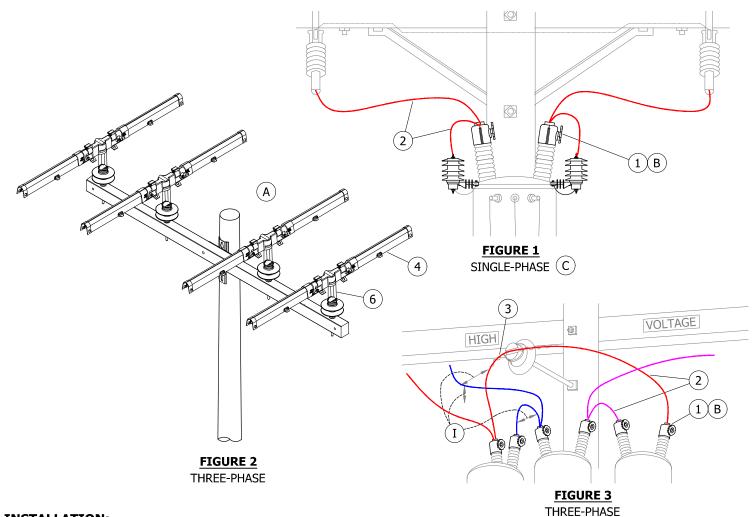
REFERENCE:

- FOR DETERMINING WHERE AVIAN PROTECTION COVER-UP DEVICES SHOULD BE INSTALLED, SEE 0H1610.
- a. FOR DETERMINING WHERE AVIAN (b) FOR JUMPER COVER, SEE OH1630.

SCOPE: THIS STANDARD ILLUSTRATES THE INSTALLATION OF AVIAN PROTECTION COVER UP FOR BOTH SINGLE PHASE AND THREE PHASE TRANSFORMER CONSTRUCTION IN AVIAN PROTECTION CRITICAL AREAS AND FOR ALL NEW TRANSFORMER INSTALLATIONS.

CAUTION:

THIS COVER UP METHOD IS FOR INCIDENTAL WILDLIFE CONTACT ONLY. THEY ARE NOT RATED FOR PERSONAL PROTECTION AND SHOULD BE TREATED AS ENERGIZED CONDUCTORS.



INSTALLATION:

- THE REQUIRED MINIMUM DISTANCE OF UNCOVERED CONDUCTOR PHASE-TO-PHASE, PHASE-TO-NEUTRAL, OR PHASE-TO-GROUND IS 60".
- THE HAND WHEEL THAT IS SUPPLIED WITH THE BUSHING COVER MUST BE INSTALLED TO SECURE THE COVER TO THE BUSHING AND PREVENT ANIMALS FROM MAKING CONTACT WITH THE BUSHING CONNECTION. THE JUMPER WIRE SHALL BE SECURED USING THE EYEBOLT TIGHTENING NUT, WHILE THE HAND WHEEL SHALL THREAD ONTO THE REMAINING THREADS. IF THERE ARE NOT ENOUGH THREADS REMAINING, THE EYEBOLT TIGHTENING NUT SHALL BE REPLACED WITH THE HAND WHEEL AND HAND TIGHTENED ONLY.
- (C) USE SELF FUSING SILICONE TAPE (SQUIRREL TAPE) FOR COVERING HIGH VOLTAGE CONNECTIONS. FOR DIFFICULT TO COVER TERMINATIONS, LAYER TAPE PER MANUFACTURERS INSTRUCTIONS.

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С	NOTES UPDATE	-	JC	JS	CZH	04/22/2019	F						
В	DRAWING UPDATE	-	PEI	-	-	01/15/2019	Е	TABLE UPDATE	EDM	RSL	JES	FRC	02/14/2022
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SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS

AVIAN COVER-UP PROTECTION AND TRANSFORMER LEAD WIRES

OH1630.1

BILL OF MATERIALS:

ITEM	DESCRIPTION	QUANTITY	STANDARD PAGE	STOCK NUMBER	DESIGN UNITS
1	BUSHING COVER, TRANSFORMER	AS REQ'D		S289188 X	BSGCOV
2	WIRE, #4-7 STR CU, WITH POLYETHYLENE COVER	AS REQ'D		S815044	POLY4J
3	WIRE, #6 SOLID CU, COVERED (TIE WIRE)	AS REQ'D		S811852	CS6C
4	EXTENSION ARM COVER	AS REQ'D	1620		
_	SELF FUSING SILICONE TAPE 1" (SQUIRREL TAPE)	AS REQ'D		S721736 X	
5	SELF FUSING SILICONE TAPE 2" (SQUIRREL TAPE)	AS REQ'D		S721738 X	
6	COVER, AVIAN FOR TIE TOP INSULATORS	AS REQ'D		S289656	PORCVR

NOTES:

- (I) REQUIRES AVIAN PROTECTION.
- (x) THIS ITEM IS EXEMPT.

REFERENCE:

- a. FOR DETERMINING WHERE AVIAN PROTECTION COVER-UP DEVICES SHOULD BE INSTALLED, SEE OH1610 OR GO TO LAND SERVICES GEOGRAPHIC INFORMATION SYSTEMS (LS-GIS) FOR MAPPING LAYER TITLED "AVIAN AREA" UNDER ENVIRONMENTAL.
- b. FOR COMPLETE TABLE OF ALL AVAILABLE AVIAN COVERS; SEE OH1620.

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С	NOTES UPDATE	-	JC	JS	CZH	04/22/2019	F						
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Α	ORIGINAL ISSUE	-	-	PIA	МЈС	03/21/2012	D	TABLE UPDATE	EDM	GLW	JES	CZH	09/14/2020

SHEET 2 OF 2

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SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS

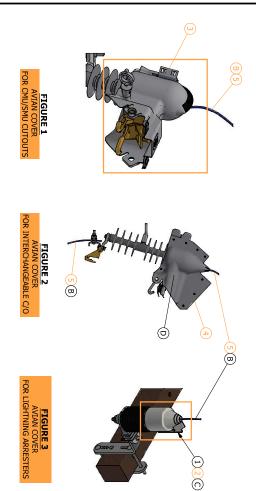
AVIAN COVER-UP PROTECTION AND TRANSFORMER LEAD WIRES

OH1630.2

SCOPE: THIS STANDARD ILLUSTRATES THE INSTALLATION OF AVIAN PROTECTION COVER-UP DEVICES FOR BOTH LIGHTNING ARRESTERS AND CUTOUTS. ALL LIGHTNING ARRESTERS REQUIRE COVER-UP. \bigcirc

ATTENTION:

THESE COVER-UP DEVICES ARE FOR INCIDENTAL WILDLIFE CONTACT ONLY. THEY ARE NOT RATED FOR PERSONAL PROTECTION AND SHOULD BE TREATED AS BARE WIRE.



INSTALLATION:

- ₽ THE REQUIRED MINIMUM DISTANCE OF UNCOVERED CONDUCTOR PHASE-TO-PHASE, PHASE-TO-NEUTRAL AND PHASE-TO-GROUND IS 60 INCHES.
- ദ FOR NEW CONSTRUCTION, OR WHEN DE-ENERGIZING EXISTING CONSTRUCTION, USE HENDRIX TAP COVERED WIRE IN PLACE OF JUMPER COVER.
- 0 SILICONE TAPE (2) MAY ALSO BE USED IN LIEU OF THE ARRESTER COVERS OR, FOR ANY DIFFICULT TO COVER TERMINATIONS OUBLE LAP TAPE PER MANUFACTURER'S INSTRUCTIONS, BLACK ELECTRICAL TAPE MAY BE APPLIED OVER THE SQUIRREL TAPE IF
- WHEN INSTALLING THE CUTOUT COVER, UNIVERSAL FIT $\bigcirc{0}$ DO NOT PIN THE COVER. THERE IS A PIN PROVIDED BUT DO NOT USE IT. INSTALL AVIAN COVER UP ON ALL HIGH VOLTAGE CONNECTIONS AND DEVICES PER OVERHEAD STANDARD 1610. INSTALL AVIAN
- <u>m</u> 🗇 AVIAN PROTECTION AREA. COVER OR PROTECTION TO DEVICES AND CONDUCTORS WHEN REPAIRS ARE MADE DUE TO ANIMAL CONTACTS OUTSIDE THE

BILL OF MATERIALS:

ITEM	DESCRIPTION	QUANTITY	STANDARD PAGE	STANDARD PAGE STOCK NUMBER DESIGN UNITS	DESIGN UNITS
	SELF FUSING SILICONE TAPE, 1" (SQUIRREL TAPE)	AS REQ'D	ı	S721736 (X)	i
١	SELF FUSING SILICONE TAPE, 2" (SQUIRREL TAPE)	AS REQ'D	ı	S721738 🛞	i
,	COVER, BUSHING, LARGE, RAUCKMAN	AS REQ'D	-	S289270	-
,	COVER, BUSHING, TRANSFORMER, GRAY	AS REQ'D	1630	S289670	BSHCOV (X)
w	COVER AVIAN 900A DISC CHITOHIT STYLE	AS REO'D		S289616	PFCORM
Ų	Control transfer and the control to	TO THE P		S289614	PFCORG
4	CUTOUT COVER, UNIVERSAL FIT	AS REQ'D	-	S289662	CCOUNI
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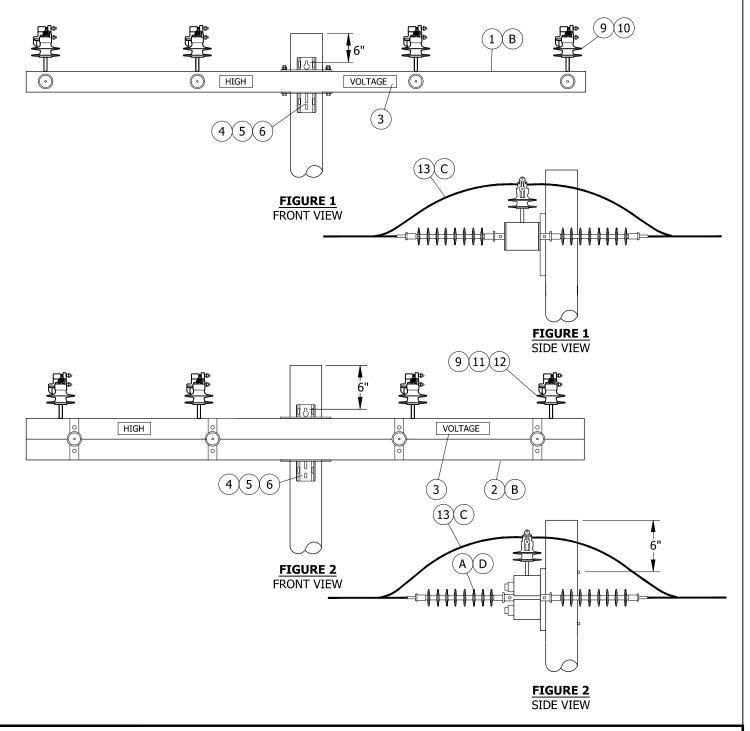
X THIS ITEM IS EXEMPT

REFERENCE: NONE

CHANGE	DRWN	DRWN BY CHKD APVD DATE	СНКО	APVD	DATE		SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS	STANDARDS	SCALE: NOT TO SCALE	SCALE
) FORMAT/ EDITORIAL CHANGES	ARC	SPC	MRF	KRG	KRG 08/30/2023	なりつつ	I TOUTNING ABBECTED AND CUTOUT OF	WEB_IID DEVICES	DRAWING NO: SHEET:	SHEET:
TABLE UPDATE	EDM	MRF	JES	CZH	CZH 08/25/2021	NO STORE	EOD AVIAN BROTECTIO	DECITION CONTRACTS	OH1640 1	1 2 1
DITORIAL CHANGES		JCE	JS	CZH 06/14/2019	06/14/2019		TON AVIAN PROTECTION	2	Olitotoli	-
and Electric Company. All rights reserved. Removal of this copyright notice without permission is not permitted under law.	. Removal of	f this copyri	ght notice w	ithout pern	nission is no	permitted under law.	Indicates Latest Revision Completely Revised	New Page	Information Removed	moved

REVISED TO 3D F

SCOPE: THIS STANDARD ILLUSTRATES THE APPLICATION OF COVERED JUMPER WIRE FOR EXISTING POLES IN THREE- OR FOUR-WIRE CONSTRUCTION, SPECIFICALLY IN AVIAN PROTECTION AREAS. THE STANDARD APPLIES TO POLES WHERE ONLY A SINGLE CIRCUIT EXISTS, WITH DEAD-ENDS. THIS CONSTRUCTION IS ONLY TO BE USED ON EXISTING WOOD POLES THAT DO NOT MEET THE CLEARANCE REQUIREMENT FOR UNDERARM CONSTRUCTION, BUT DO MEET THE POLE LOADING CALCULATION. IT ALSO APPLIES WHERE INSTALLATION OF A TALLER POLE IS NOT PRACTICAL.



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REV	CHANGE	DR	BY	DSN	APV	DATE	REV	CHANGE	DR	BY	DSN	APV	DATE
С	BILL OF MATERIALS UPDATE	EDM	GLW	JES	CZH	1/14/2020	F						
В	DRAWING UPDATE	PEI	-	-	-	01/15/2019	Е						
Α	ORIGINAL ISSUE	-	JC	IL	JS	01/05/2015	D						

Completely Revised

Indicates Latest Revision

SHEET 1 OF 2

SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS

New Page

Information Removed

MODIFIED CONSTRUCTION FOR EXISTING POLES AVIAN SAFE CONSTRUCTION

OH1654.1

INSTALLATION:

- (A) SHORTER DEADEND INSULATORS CAN BE USED ON OUTSIDE PHASE POSITION ON ARM SIDE.
- B ENSURE THE FOLLOWING CALCULATION IS NOT VIOLATED WHEN COMPARING APPLIED LOADS TO ALLOWABLE LOADS SO THAT AN OVERALL SAFETY FACTOR OF TWO IS MAINTAINED:

(APPLIED VERTICAL LOAD)
(ALLOWABLE VERTICAL LOAD) + (APPLIED HORIZONTAL LOAD) + (APPLIED TRANSVERSE LOAD) (ALLOWABLE HORIZONTAL LOAD) + (ALLOWABLE TRANSVERSE LOAD) ≤ 1

- (C) SIZE AS REQUIRED WITH MINIMUM SIZE EQUAL TO LINE CONDUCTOR AMPACITY OR GREATER.
- (D) SHACKLES TO BE USED WITH FIBERGLASS, STACKED, DEADEND CROSSARMS IN TRANSVERSE (SIDE STRAIN) APPLICATIONS.

BILL OF MATERIALS:

ITEM	DESCRIPTION	QUANTITY	STANDARD PAGE	STOCK NUMBER	DESIGN UNITS
1	CROSSARM, FIBERGLASS, DEADEND	AS REQ'D	379	-	-
2	CROSSARM, FIBERGLASS, DEADEND, STACKED	AS REQ'D	379	-	-
3	SIGN, ADHESIVE STICKER, HIGH VOLTAGE FOR FIBERGLASS	2	751	S701760	HV/D
4	BOLT, MACHINE, GALV, W/NUT 3/4" X (LENGTH AS REQ'D)	AS REQ'D	392.1	-	-
5	WASHER, CURVED, SQUARE 3/4"	AS REQ'D	392.2	S797760	RIBWSH
6	SPRING, LOCK, WASHER	AS REQ'D	392.1	S796802X	LK-WSH
7	SHACKLE, 5/8" PIN,	AS REQ'D	744	S636432X	30KSHK
8	STRAIN CLAMPS	AS REQ'D	741-743	-	-
9	INSULATOR, 1" THREAD, PIN TYPE	AS REQ'D	750.2	-	-
10	INSULATOR, DE POLYMER, 35KV	AS REQ'D	392.2	S428958	LONGDE
11	BOLT, MACHINE, GALV, W/NUT 5/8" X 10"	AS REQ'D	392.1	-	-
12	PIN, TRANSFORMER	AS REQ'D	396	S529248	PS/01
13	WIRE, POLY COVERED COPPER C	AS REQ'D	718	-	-

NOTES:



REFERENCE:

- a. BONDING FOR CONTAMINATION DISTRICT 1 ONLY, SEE STD. 1003.
- b. FIBERGLASS CROSSARM ALLOWABLE LOADING, SEE STANDARD 379.
- c. COVERED COPPER EQUIPMENT AND LINE WIRE JUMPERS, SEE STANDARD 718.
- (d) STRAIN CLAMP SIZE AND CONDUCTOR USE, SEE STD. 741-743.

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REV	CHANGE	DR	BY	DSN	APV	DATE	REV	CHANGE	DR	BY	DSN	APV	DATE
C	BILL OF MATERIALS UPDATE	EDM	GLW	JES	CZH	1/14/2020	F						
В	DRAWING UPDATE	PEI	-	-	-	01/15/2019	Е						
Α	ORIGINAL ISSUE		JC	IL	JS	01/05/2015	D						

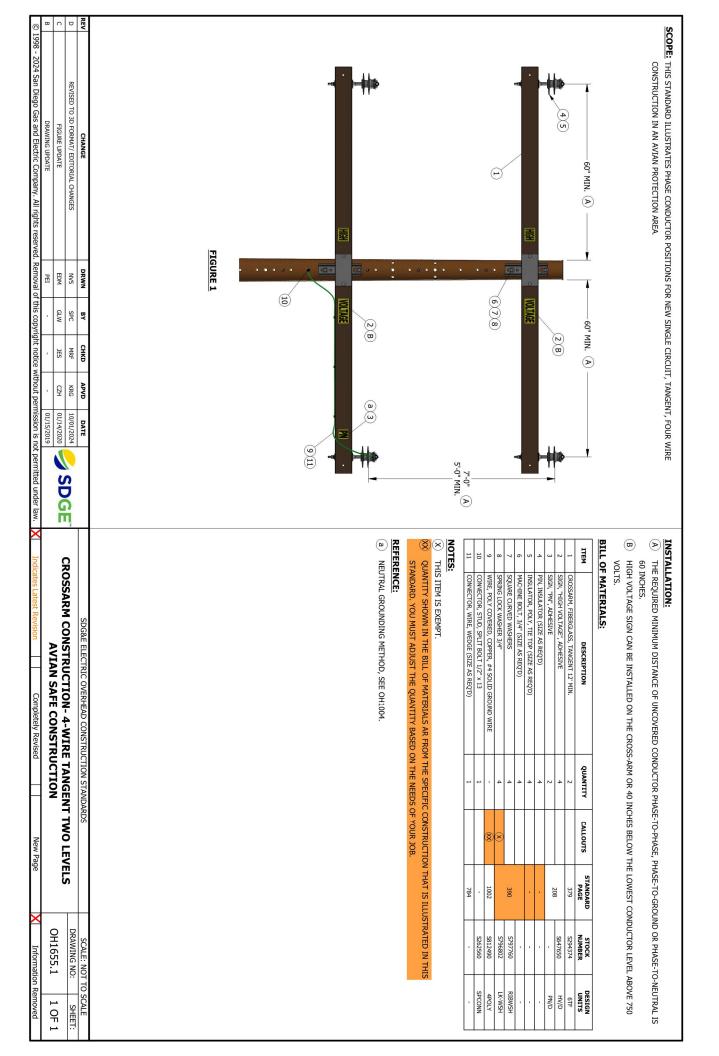
SHEET 2 OF 2

Indicates Latest Revision | Completely Revised | New Page | Information Removed | SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS

SPACE ELECTRIC OVERTICAL CONSTRUCTION STANDARD

OH1654.2

MODIFIED CONSTRUCTION FOR EXISTING POLES AVIAN SAFE CONSTRUCTION



9			As-Built Crew Foreman Date Completed	Smart Form	No Materials Used
Notification	300000575395	Workorder	530000338845	Operation 0006	Company SDED
Address	5888 AvenIda Jinete B	Bonsall			
Job Title	C233 HFTD AP_RPL	GP QA	11		
Comments				Crew Comments	

Location Location 0001

Location Comments

P519320 EX: 70'-2 WOOD POLE TO REMAIN EX: 1-15KVA (HE) XFMR TO REMAIN STA# 233-162 INS: 1- AVIAN PROTECTIVE COVER INS: 2-AVIAN EXTENSION ARMS INS: 2- BUSHING COVERS CREWS TO REPLACE UNCOVERED JUMPER

CU Name	Work Function	Stock Code	Stock Description		Planned	Actual	Scrap	As Designed
BS6	REMOVE	S813536	WIRE, #6 AWG 3 STRAND BARE HARD DRAWN CO	FT	20.172			П
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			Г
DBLVPI	INSTALL	S289654	COVER, WILDLIFE, FOR DOUBLE VERTICAL POS	EA	1			r
EXACVR	INSTALL	S289660	COVER, AVIAN, EXTENSION ARM FOR RAPTOR C	EA	2			r
BSHCOV	INSTALL	S289670	COVER, BUSHING, HI-SIDE, TRANSFORMER/ LI	EA	1			N

Location Location 0002

Location Comments

P411667 EX: 50'-5 WOOD POLE TO REMAIN EX: 1-25KVA (HE) XFMR TO REMAIN STA# 233-160 INS: 2- AVIAN PROTECTIVE COVERS INS: 4-AVIAN EXTENSION ARMS INS: 2- BUSHING COVERS CREWS TO REPLACE UNCOVERED JUMPER

CU Name	Work Function	Stock Code	Stock Description		Planned	Actual	Scrap	As Designed
BS6	REMOVE	S813536	WIRE, #6 AWG 3 STRAND BARE HARD DRAWN CO	FT	20.172			П
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			4
DBLVPI	INSTALL	S289654	COVER, WILDLIFE, FOR DOUBLE VERTICAL POS	EA	2			r
EXACVR	INSTALL	S289660	COVER, AVIAN, EXTENSION ARM FOR RAPTOR C	EA	4			rt
BSHCOV	INSTALL	S289670	COVER, BUSHING, HI-SIDE, TRANSFORMER/ LI	EA	1			T\$

Location | Location 0003

Location Comments

P611012 EX: 55'-3 WOOD POLE TO REMAIN CREWS TO REPLACE UNCOVERED JUMPER WIRE CREWS TO WALK IN

CU Name	Work Function	Stock Code	Stock Description		Planned	Actual	Scrap	As Designed
A2	REMOVE	S812000	WIRE, #2-6/1 ACSR/AW, SPECULAR, CODE WOR	FT	56.703			Т
55-5/I	REMOVE	S429270	INSULATOR, VICE TOP PIN, 1 INCH THIS RE	EA	1			П
PS1	REMOVE	S532706	PIN, 1", NYLON THREAD, INSULATOR, HOT DI	EA	1			Г
PS/O1	REMOVE	S529248	PIN 1" THREAD 5-1/4" HIGH LEAD TOP GALVA	EA	1			П
CWA2	INSTALL	S812100	WIRE, COVERED LINE, # 2 - 7 STRAND 1350	FT	60			П
IPULG	INSTALL	S429272	INSULATOR, VICE TOP PIN, 1 - 3/8 INCH T	EA	1			Г
PS1LG	INSTALL	S532448	PIN, INSULATOR, 12KV, FORGED STEEL, GALV	EA	1			N

Location Location 0004

Location Comments

P818201 EX: 45'-3 WOOD POLE TO REMAIN EX: 1-25KVA (HE) XFMR TO REMAIN STA# 233-814 INS: 2- BUSHING COVERS CREWS TO REPLACE UNCOVERED JUMPER WIRE

CU Name	Work Function	Stock Code	Stock Description		Planned	Actual	Scrap	As Designed
BS6	REMOVE	S813536	WIRE, #6 AWG 3 STRAND BARE HARD DRAWN CO	FT	20.172			П
55-5/I	REMOVE	S429270	INSULATOR, VICE TOP PIN, 1 INCH THIS RE	EA	1			П
PS/O1	REMOVE	S529248	PIN 1" THREAD 5-1/4" HIGH LEAD TOP GALVA	EA	1			П
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			П
IPULG	INSTALL	S429272	INSULATOR, VICE TOP PIN, 1 - 3/8 INCH T	EA	1			П
BSHCOV	INSTALL	S289670	COVER, BUSHING, HI-SIDE, TRANSFORMER/ LI	EA	1			I

Location | Location 0005

Location Comments

P512007 EX: 45'-3 WOOD POLE TO REMAIN EX: 1-25KVA (HE) XFMR TO REMAIN STA# 233-164 CREWS TO REPLACE UNCOVERED JUMPER WIRE CREWS TO WALK IN

CU Name	Work Function	Stock Code	Stock Description		Planned	Actual	Scrap	As Designed	
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CU Name	Work Function	Stock Code	Stock Description		Planned	Actual	Scrap	As Designed
A2	REMOVE	S812000	WIRE, #2-6/1 ACSR/AW, SPECULAR, CODE WOR	FT	9.451			П
BS6	REMOVE	S813536	WIRE, #6 AWG 3 STRAND BARE HARD DRAWN CO	FT	20.172			П
55-5/I	REMOVE	S429270	INSULATOR, VICE TOP PIN, 1 INCH THIS RE	EA	3			Г
PS1	REMOVE	S532706	PIN, 1", NYLON THREAD, INSULATOR, HOT DI	EA	2			П
PS/O1	REMOVE	S529248	PIN 1" THREAD 5-1/4" HIGH LEAD TOP GALVA	EA	1			П
CWA2	INSTALL	S812100	WIRE, COVERED LINE, # 2 - 7 STRAND 1350	FT	10			П
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			T _i
IPULG	INSTALL	S429272	INSULATOR, VICE TOP PIN, 1 - 3/8 INCH T	EA	3			T.
PS1LG	INSTALL	S532448	PIN, INSULATOR, 12KV, FORGED STEEL, GALV	EA	2			1