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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

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.² 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

²

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

Attachment A

<u>PAGE</u>	<u>SUBJECT</u>
1610	AVIAN PROTECTION - GENERAL
1615	AVIAN MORTALITY REPORTING REQUIREMENTS AND PROCEDURES
1620	PIN AND INSULATOR COVER-UP DEVICES FOR AVIAN PROTECTION
1630	AVIAN COVER-UP PROTECTION AND TRANSFORMER LEAD WIRES
1640	LIGHTNING ARRESTER AND CUTOUT COVER-UP DEVICES FOR AVIAN PROTECTION
1654	MODIFIED CONSTRUCTION FOR EXISTING POLES AVIAN SAFE CONSTRUCTION
1655	CROSSARM CONSTRUCTION - 4-WIRE TANGENT TWO LEVELS - AVIAN SAFE CONSTRUCTION

REV	CHANGE	DRWN	BY	CHKD	APPD	DATE		SDGE ELECTRIC OVERHEAD CONSTRUCTION STANDARDS				SCALE: NOT TO SCALE	
J	OH1650, OH1651, OH1652, OH1653 MOVED TO FMO	ARC	RSL	JAS	KRG	04/07/2023		WILDLIFE PROTECTION TABLE OF CONTENTS				DRAWING NO:	SHEET:
I	OH1660 MOVED TO FMO	EDM	RSL	JAS	KRG	09/30/2022						OH1601.1	1 OF 1
H	REVISED TO 3D FORMAT	ARC	JIK	-	-	06/14/2022							
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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 SDGE EQUIPMENT AND FACILITIES (E.G. POLES, TOWERS, SUBSTATIONS) AN AVIAN MORTALITY REPORT (AMR) WITH DIGITAL PHOTOS MUST BE COMPLETED AND FORWARDED TO THE SDGE 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 AMR TO THE PRIMARY SDGE 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 SDGE 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

NOTES :

- I. 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 SDGE EPBR BIOLOGIST IMMEDIATELY. EAGLES (INCLUDES GOLDEN, BALD AND OSPREY) EXIST WITHIN SDGE 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. 668-688C)
 - b. THE MIGRATORY BIRD TREATY ACT (16 U.S.C. 703-712)
 - c. SDGE STANDARD PRACTICE 147 "AVIAN MORTALITY REPORTING PROCEDURE".

REV	CHANGE	DRAWN	BY	CHKD	APVD	DATE	<div> SDGE San Diego Gas & Electric Company</div>							SDGE ELECTRIC OVERHEAD CONSTRUCTION STANDARDS				SCALE: NOT TO SCALE	
D	REVISED TO 3D FORMAT	AAC	JIK	-	-	06/14/2022	<div>AVIAN MORTALITY REPORTING REQUIREMENTS AND PROCEDURES</div>										DRAWING NO:	SHEET:	
C	EDITORIAL CHANGES	-	JIK	JES	CZH	11/12/2019											OH1615.1	1 OF 1	
B	DRAWING UPDATE	-	PEI	-	-	01/15/2019											Information Removed		
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SCOPE: THIS STANDARD ILLUSTRATES THE INSTALLATION OF AVIAN PROTECTION COVER-UP DEVICES FOR PIN AND INSULATOR CONSTRUCTION WITH BARE CONDUCTOR.

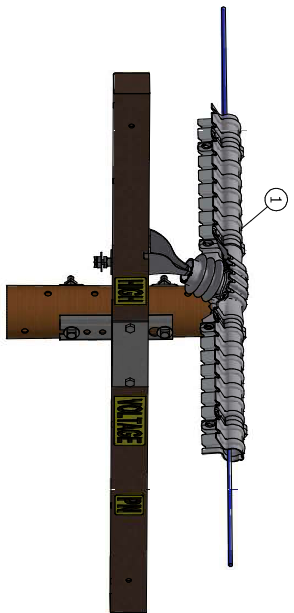


FIGURE 1

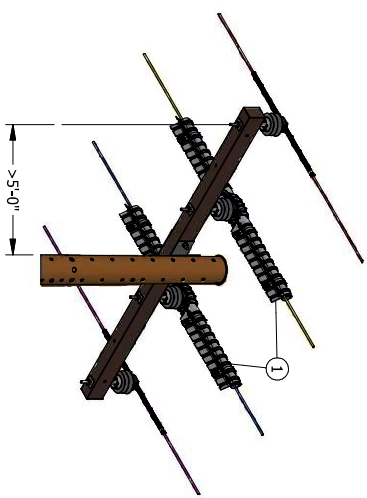


FIGURE 2 (A) (B) (II)

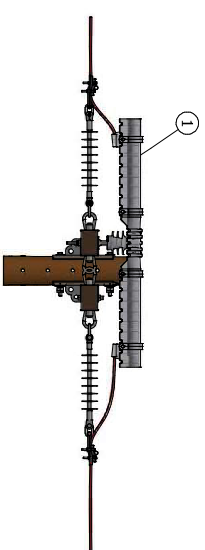


FIGURE 3

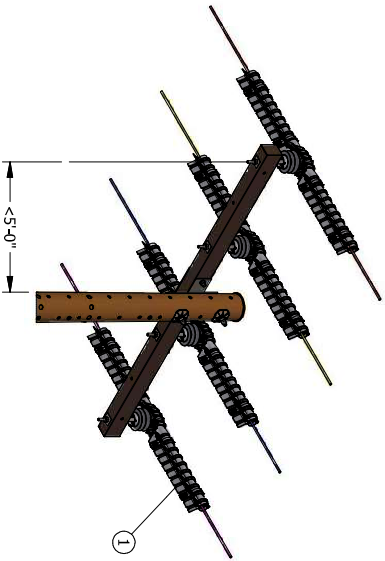


FIGURE 4 (II)

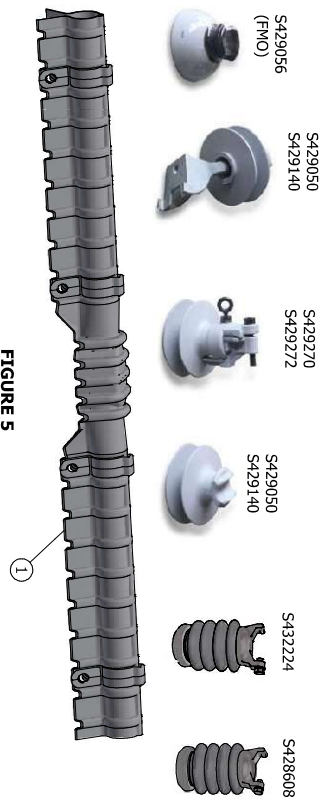


FIGURE 5



FIGURE 6

REV	CHANGE	DRWN	BY	CHKD	APVD	DATE	SDGE				SDGE ELECTRIC OVERHEAD CONSTRUCTION STANDARDS				SCALE: NOT TO SCALE	
G	REVISED TO 3D FORMAT/ EDITORIAL CHANGES	ARC	SPC	MRE	KRG	06/16/2023									DRAWING NO:	SHEET:
F	FIGURE UPDATE	EDM	JIK	JES	CZH	10/01/2021									OH1620.1	1 OF 2
E	EDITORIAL CHANGES	-	JC	JS	CZH	04/22/2019										Information Removed

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PIN AND INSULATOR COVER-UP DEVICES FOR AVIAN PROTECTION

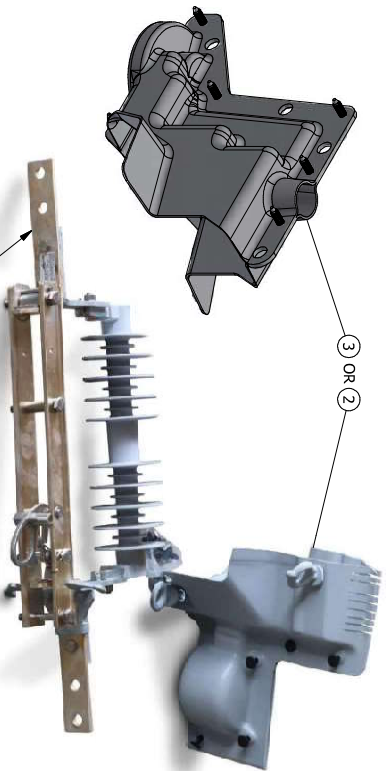


FIGURE 7
VERTICAL SWITCH, SINGLE DISCONNECT HOOK SWITCH, 27KV, 900A



FIGURE 8

INSTALLATION:

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

(B) DOUBLE ARMS: WHEN A DOUBLE PI COVER WILL NOT SUFFICE, TWO SINGLE COVERS MAY BE UTILIZED AND TRIMMED TO FIT.

BILL OF MATERIALS:

ITEM	DESCRIPTION	QUANTITY	STANDARD PAGE	STOCK NUMBER	DESIGN UNITS
1	COVER, TANGENT, SIDE TIE, AVIAN, RAUCKMAN	AS REQ'D	-	5289672	PIRM
2	COVER, 900A DISCONNECT, CUTOUT STYLE	AS REQ'D	-	5289948	900C/R
3	COVER, AVIAN, 900A DISCONNECT, CUTOUT STYLE, RAUCKMAN	AS REQ'D	-	5289952	900C/R
4	PIN AND INSULATOR COVER, DOUBLE 55-3, 55-5, OR 56-1 SIDE TIE, OR DOUBLE VPI/CLAMP TOP	AS REQ'D	-	5289654	DBL VPI
5	COVER, AVIAN, EXTENSION ARM, FOR RAPTOR COVERS	AS REQ'D	-	5289660	EXA/C/R
6	CAPACITOR SENSOR COVER	AS REQ'D	-	5289606	LC/M

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.

(II) FOR STEEL POLE CONSTRUCTION COVER ALL CONDUCTORS ON 10-FOOT CROSSARMS OR LESS, FOR 12-FOOT AND 15-FOOT CROSSARMS COVER ONLY THE INSIDE CONDUCTORS.

REFERENCE:

- FOR DETERMINING WHERE AVIAN PROTECTION COVER-UP DEVICES SHOULD BE INSTALLED, SEE OH1610.
- FOR JUMPER COVER, SEE OH1630.

REV	CHANGE	DRWN	BY	CHKD	APVD	DATE
G	REVISED TO 3D FORMAT/ EDITORIAL CHANGES	ARC	SPC	MRF	KRG	06/16/2023
F	FIGURE UPDATE	EDM	JKK	JES	CZH	10/01/2021
E	EDITORIAL CHANGES	-	JC	JS	CZH	04/22/2019



SDGE ELECTRIC OVERHEAD CONSTRUCTION STANDARDS						SCALE: NOT TO SCALE	
PIN AND INSULATOR COVER-UP DEVICES FOR AVIAN PROTECTION						DRAWING NO:	SHEET:
						OH1620.2	2 OF 2
Indicates Latest Revision						Completely Revised	New Page
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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.

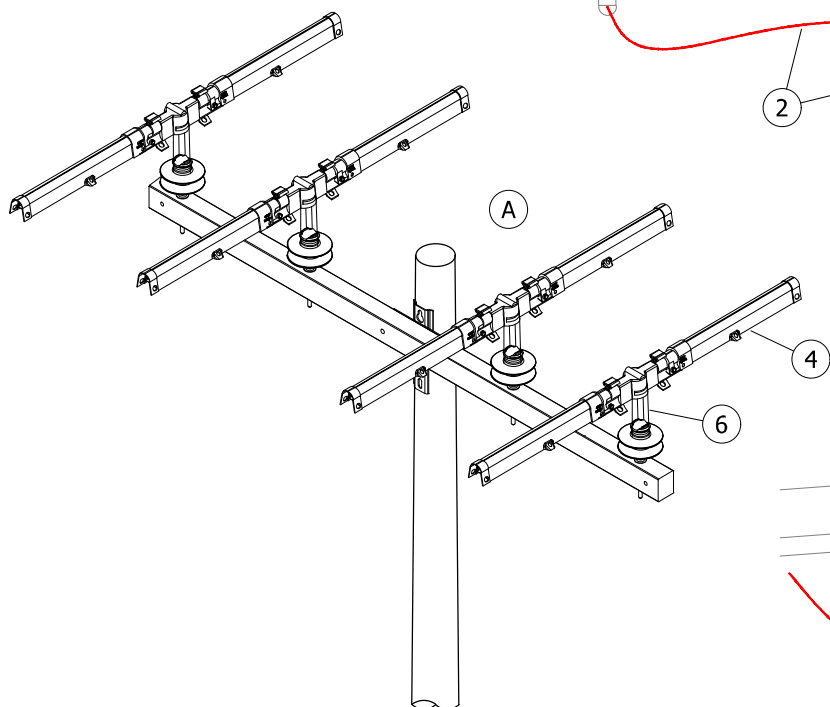


FIGURE 2
THREE-PHASE

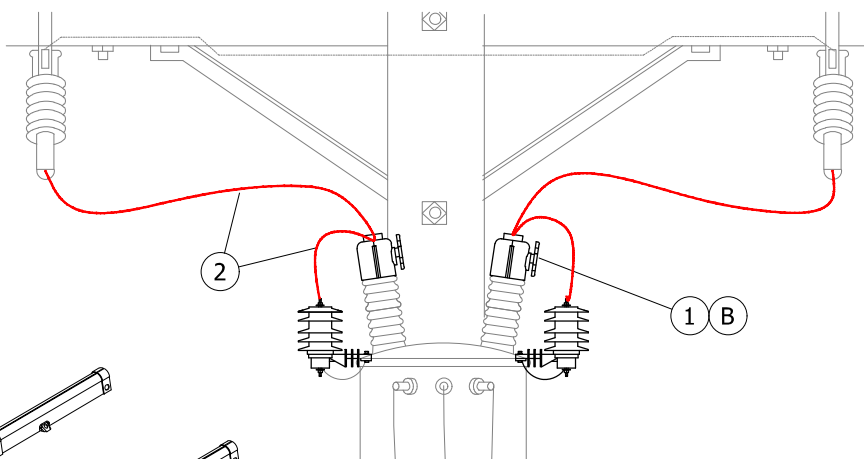


FIGURE 1
SINGLE-PHASE C

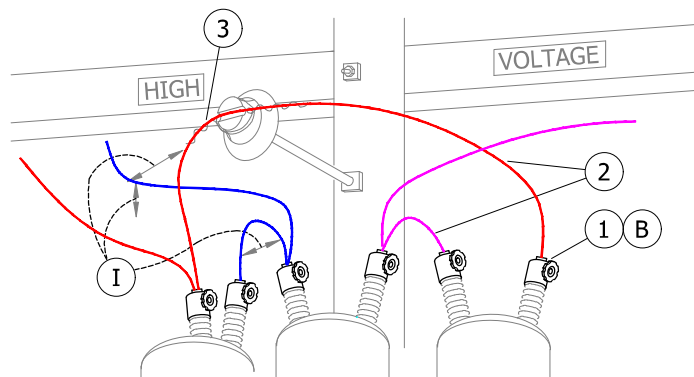


FIGURE 3
THREE-PHASE

INSTALLATION:

- A THE REQUIRED MINIMUM DISTANCE OF UNCOVERED CONDUCTOR PHASE-TO-PHASE, PHASE-TO-NEUTRAL, OR PHASE-TO-GROUND IS 60".
- B 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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REV	CHANGE	DR	BY	DSN	APV	DATE	REV	CHANGE	DR	BY	DSN	APV	DATE
C	NOTES UPDATE	-	JC	JS	CZH	04/22/2019	F						
B	DRAWING UPDATE	-	PEI	-	-	01/15/2019	E	TABLE UPDATE	EDM	RSL	JES	FRC	02/14/2022
A	ORIGINAL ISSUE	-	-	PIA	MJC	03/21/2012	D	TABLE UPDATE	EDM	GLW	JES	CZH	09/14/2020

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SHEET
1 OF 2

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 (B)	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	--	--
5	SELF FUSING SILICONE TAPE 1" (SQUIRREL TAPE)	AS REQ'D	--	S721736 (X)	--
	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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REV	CHANGE	DR	BY	DSN	APV	DATE	REV	CHANGE	DR	BY	DSN	APV	DATE
C	NOTES UPDATE	-	JC	JS	CZH	04/22/2019	F						
B	DRAWING UPDATE	-	PEI	-	-	01/15/2019	E	TABLE UPDATE	EDM	RSL	JES	FRC	02/14/2022
A	ORIGINAL ISSUE	-	-	PIA	MJC	03/21/2012	D	TABLE UPDATE	EDM	GLW	JES	CZH	09/14/2020

X	Indicates Latest Revision	Completely Revised	New Page	Information Removed
SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS				
AVIAN COVER-UP PROTECTION AND TRANSFORMER LEAD WIRES				

SHEET
2 OF 2

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 (C)

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.

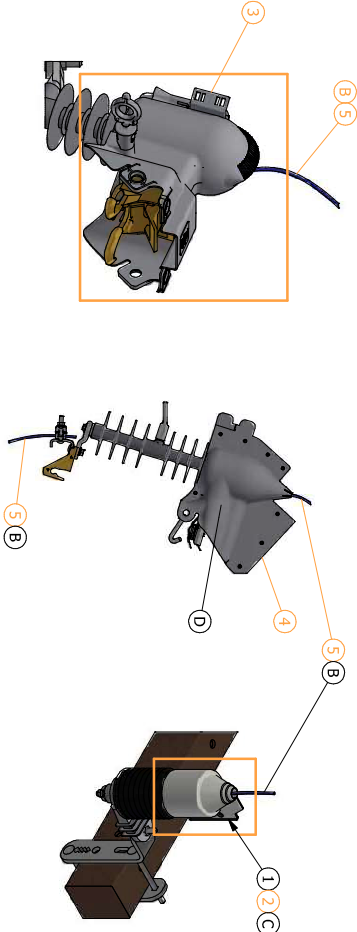


FIGURE 1
AVIAN COVER
FOR CMU/SMU CUTOUTS

FIGURE 2
AVIAN COVER
FOR INTERCHANGEABLE C/O

FIGURE 3
AVIAN COVER
FOR LIGHTNING ARRESTERS

INSTALLATION:

- A. THE REQUIRED MINIMUM DISTANCE OF UNCOVERED CONDUCTOR PHASE-TO-PHASE, PHASE-TO-NEUTRAL AND PHASE-TO-GROUND IS 60 INCHES.
- B. FOR NEW CONSTRUCTION, OR WHEN DE-ENERGIZING EXISTING CONSTRUCTION, USE **HENDRIX TAP COVERED WIRE** IN PLACE OF JUMPER COVER.
- C. SILICONE TAPE (2) MAY ALSO BE USED IN LIEU OF THE ARRESTER COVERS OR, FOR ANY DIFFICULT TO COVER TERMINATIONS DOUBLE LAP TAPE PER MANUFACTURER'S INSTRUCTIONS. BLACK ELECTRICAL TAPE MAY BE APPLIED OVER THE SQUIRREL TAPE IF NECESSARY.
- D. WHEN INSTALLING THE CUTOUT COVER, UNIVERSAL FIT (4) DO NOT PIN THE COVER. THERE IS A PIN PROVIDED BUT DO NOT USE IT.
- E. INSTALL AVIAN COVER UP ON ALL HIGH VOLTAGE CONNECTIONS AND DEVICES PER OVERHEAD STANDARD 1610. INSTALL AVIAN COVER OR PROTECTION TO DEVICES AND CONDUCTORS WHEN REPAIRS ARE MADE DUE TO ANIMAL CONTACTS OUTSIDE THE AVIAN PROTECTION AREA.

BILL OF MATERIALS:

ITEM	DESCRIPTION	QUANTITY	STANDARD PAGE	STOCK NUMBER	DESIGN UNITS
1	SELF FUSING SILICONE TAPE, 1" (SQUIRREL TAPE)	AS REQ'D	-	5721736 (X)	-
	SELF FUSING SILICONE TAPE, 2" (SQUIRREL TAPE)	AS REQ'D	-	5721738 (X)	-
2	COVER, BUSHING, LARGE, RAUCOMAN	AS REQ'D	-	5289270	-
	COVER, BUSHING, TRANSFORMER, GRAY	AS REQ'D	1630	5289670	BSHCOV (X)
3	COVER, AVIAN, 900A, DISC, CUTOUT STYLE	AS REQ'D	-	5289616	PFCORM
	CUTOUT COVER, UNIVERSAL FIT	AS REQ'D	-	5289614	PFCORG
4	CUTOUT COVER, UNIVERSAL FIT	AS REQ'D	-	5289662	CCOJNT
5	HENDRIX TAP WIRE	(B) AS REQ'D	711	S812124	HENDX4

NOTES:

(X) THIS ITEM IS EXEMPT

REFERENCE: NONE

REV	CHANGE	DRWN	BY	CHKD	APVD	DATE	SDGE ELECTRIC OVERHEAD CONSTRUCTION STANDARDS				SCALE: NOT TO SCALE		
E	REVISED TO 3D FORMAT/ EDITORIAL CHANGES	ARC	MRF	MRF	KRG	08/20/2023	<div>SDGE</div> <div>LIGHTNING ARRESTER AND CUTOUT COVER-UP DEVICES FOR AVIAN PROTECTION</div>				DRAWING NO:	SHEET:	
D	TABLE UPDATE	EDM	MRF	JES	CZH	08/25/2021					OH1640.1	1 OF 1	
C	EDITORIAL CHANGES	-	JCE	JS	CZH	06/14/2019						Information Removed	
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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.

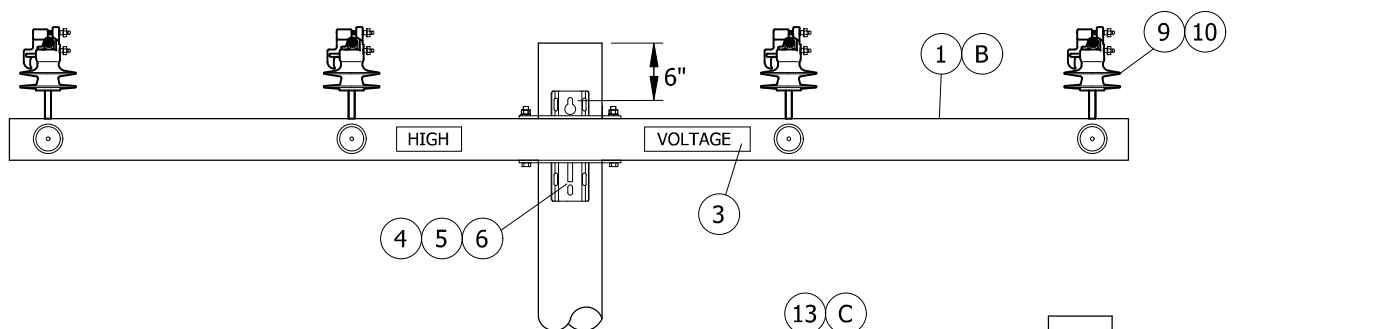


FIGURE 1
FRONT VIEW

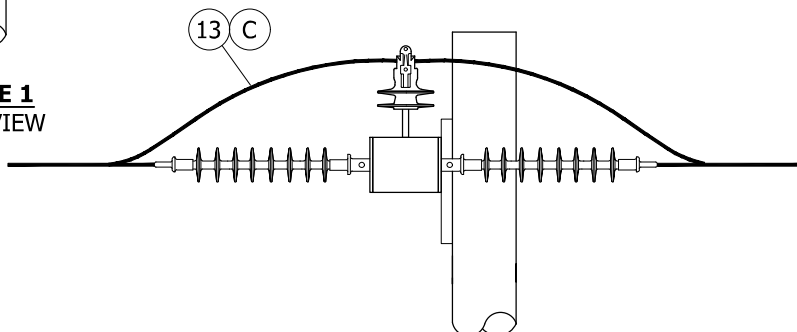


FIGURE 1
SIDE VIEW

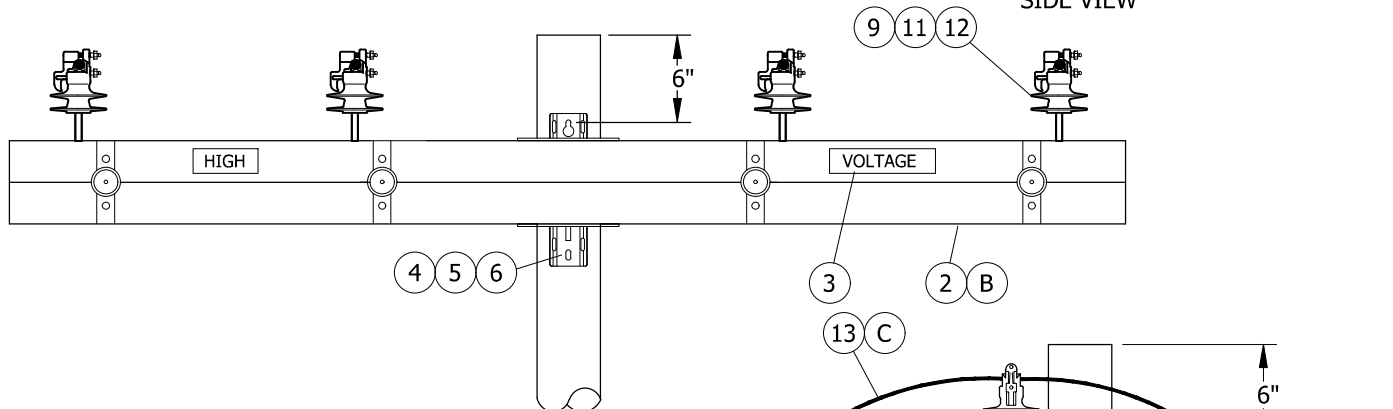


FIGURE 2
FRONT VIEW

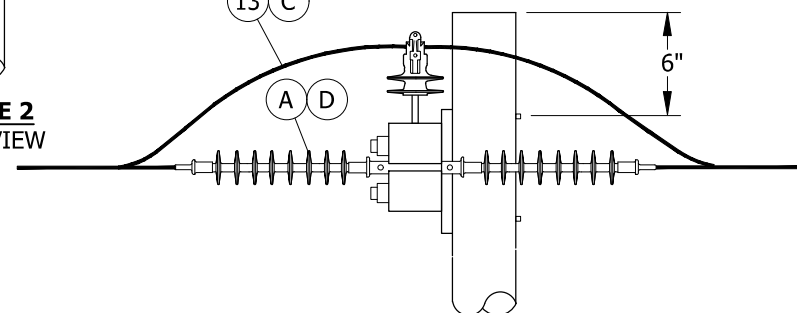


FIGURE 2
SIDE VIEW

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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						
B	DRAWING UPDATE	PEI	-	-	-	01/15/2019	E						
A	ORIGINAL ISSUE	-	JC	IL	JS	01/05/2015	D						

X	Indicates Latest Revision	Completely Revised	New Page	Information Removed
SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS				
MODIFIED CONSTRUCTION FOR EXISTING POLES AVIAN SAFE CONSTRUCTION				

SHEET
1 OF 2

OH1654.1

(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:

$$\frac{(\text{APPLIED VERTICAL LOAD})}{(\text{ALLOWABLE VERTICAL LOAD})} + \frac{(\text{APPLIED HORIZONTAL LOAD})}{(\text{ALLOWABLE HORIZONTAL LOAD})} + \frac{(\text{APPLIED TRANSVERSE LOAD})}{(\text{ALLOWABLE TRANSVERSE LOAD})} \leq 1$$

(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.

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	S796802 (X)	LK-WSH
7	SHACKLE, 5/8" PIN,	AS REQ'D	744	S636432 (X)	30KSHK
8	STRAIN CLAMPS (d)	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	-	-

☒ THIS ITEM IS EXEMPT.

- 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.

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								
B	DRAWING UPDATE	PEI	-	-	-	01/15/2019	E								
A	ORIGINAL ISSUE	-	JC	IL	JS	01/05/2015	D								
SHEET 2 OF 2		X	Indicates Latest Revision				Completely Revised			New Page			Information Removed		OH1654.2
		SDG&E ELECTRIC OVERHEAD CONSTRUCTION STANDARDS													
		MODIFIED CONSTRUCTION FOR EXISTING POLES AVIAN SAFE CONSTRUCTION													

As-Built Smart Form

☐ No Materials Used

Crew Foreman

Date Completed

5/1/24

Notification

300000575395

Workorder

530000338845

Operation 0006

Company SDED

Address

5888 Avenida Jinele Bonsall

Job Title

C233 HFTD AP_RPL GP QA

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			<input checked="" type="checkbox"/>
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			<input checked="" type="checkbox"/>
DBLVPI	INSTALL	S289654	COVER, WILDLIFE, FOR DOUBLE VERTICAL POS	EA	1			<input checked="" type="checkbox"/>
EXACVR	INSTALL	S289660	COVER, AVIAN, EXTENSION ARM FOR RAPTOR C	EA	2			<input checked="" type="checkbox"/>
BSHCOV	INSTALL	S289670	COVER, BUSHING, HI-SIDE, TRANSFORMER/ LI	EA	1			<input checked="" type="checkbox"/>

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			<input checked="" type="checkbox"/>
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			<input checked="" type="checkbox"/>
DBLVPI	INSTALL	S289654	COVER, WILDLIFE, FOR DOUBLE VERTICAL POS	EA	2			<input checked="" type="checkbox"/>
EXACVR	INSTALL	S289660	COVER, AVIAN, EXTENSION ARM FOR RAPTOR C	EA	4			<input checked="" type="checkbox"/>
BSHCOV	INSTALL	S289670	COVER, BUSHING, HI-SIDE, TRANSFORMER/ LI	EA	1			<input checked="" type="checkbox"/>

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			⌈
55-5/I	REMOVE	S429270	INSULATOR, VICE TOP PIN, 1 INCH THIS RE	EA	1			⌈
PS1	REMOVE	S532706	PIN, 1", NYLON THREAD, INSULATOR, HOT DI	EA	1			⌈
PS/O1	REMOVE	S529248	PIN 1" THREAD 5-1/4" HIGH LEAD TOP GALVA	EA	1			⌈
CWA2	INSTALL	S812100	WIRE, COVERED LINE, # 2 - 7 STRAND 1350	FT	60			⌈
IPULG	INSTALL	S429272	INSULATOR, VICE TOP PIN, 1 - 3/8 INCH T	EA	1			⌈
PS1LG	INSTALL	S532448	PIN, INSULATOR, 12KV, FORGED STEEL, GALV	EA	1			⌈

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			⌈
55-5/I	REMOVE	S429270	INSULATOR, VICE TOP PIN, 1 INCH THIS RE	EA	1			⌈
PS/O1	REMOVE	S529248	PIN 1" THREAD 5-1/4" HIGH LEAD TOP GALVA	EA	1			⌈
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			⌈
IPULG	INSTALL	S429272	INSULATOR, VICE TOP PIN, 1 - 3/8 INCH T	EA	1			⌈
BSHCOV	INSTALL	S289670	COVER, BUSHING, HI-SIDE, TRANSFORMER/ LI	EA	1			⌈

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			┐
BS6	REMOVE	S813536	WIRE, #6 AWG 3 STRAND BARE HARD DRAWN CO	FT	20.172			┐
55-5/I	REMOVE	S429270	INSULATOR, VICE TOP PIN, 1 INCH THIS RE	EA	3			┐
PS1	REMOVE	S532706	PIN, 1", NYLON THREAD, INSULATOR, HOT DI	EA	2			┐
PS/O1	REMOVE	S529248	PIN 1" THREAD 5-1/4" HIGH LEAD TOP GALVA	EA	1			┐
CWA2	INSTALL	S812100	WIRE, COVERED LINE, # 2 - 7 STRAND 1350	FT	10			┐
POLY4J	INSTALL	S815044	WIRE, #4 7 STRAND, MEDIUM COPPER, HARD D	FT	20			┐
IPULG	INSTALL	S429272	INSULATOR, VICE TOP PIN, 1 - 3/8 INCH T	EA	3			┐
PS1LG	INSTALL	S532448	PIN, INSULATOR, 12KV, FORGED STEEL, GALV	EA	2			┐