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SURVEILLANCE OPERATING INSTRUCTION S REVISION 14 EC 14-4 P ATTACHMENT 1

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ATTACHMENT 1	
WEEKLY ELECTRICAL BUS SURVEILLANCE - Both Units i	n Modes 1 thru 4
CONTINUOUS USE	
OBJECTIVE To verify Operability of the offsite transmission networ distribution system (except the diese) generators), and as required by the Technical Specification Surveillance SR 3.8.1.1, SR 3.8.7.1, SR 3.8.9.1.	the onsite DC systems
UNIT 2 MODE 5 UNIT 3 MODE 1	DATE 1-11-08
 <u>PREREQUISITES</u> 1.1 VERIFY this document is current by checking a copy or by using the method described in SO12. 1.2 Determine performance requirements of this summer to the summer tothesum to the summer to the summer tothesum to the summer to	3-VI-0.9.
 Scheduled Surveillance Post Maintenance: WAR # Partial Scheduled Surveillance. Other (e.g. Defueled, SDC secured, etc.): Unit 2 mode 4 entry TEST COMPONENT(S) All essociated with united PERFORM [] MARK N/A STEPS <u>All</u> 	<u> </u>
CIRCLE N/A FOR UNUSED STEPS (unused pages may be disc	arded)

END OF SECTION 1.0

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SURVEILLANCE OPERATING INSTRUCTION REVISION 14 EC 14-4 ATTACHMENT 1

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2.0 ACCEPTANCE CRITERIA

NOTE

If desired, then Attachment 3 may be used as an aid in performance of this attachment.

- If any Step is answered NO, then IMMEDIATELY INFORM the SRO 2.1 Ops. Supervisor, INITIATE a LCOAR or EDMR per applicable Tech. Specs., and document in the COMMENTS section. If only One qualified circuit between the offsite transmission network and the onsite Class 1E AC Electrical Power Distribution System is OPERABLE, then PERFORM S023-3-3.23, Attachment for A.C. Sources Verification.
- 2.2 Sync Circuit Check [SR 3.8.1.1]
- Perform a Sync Circuit check per S023-6-2, Section for Checking Sync Circuit Operation, and verify that <u>ALL</u> of the following breakers are SAT: (Circle N/A for any out of service breaker.) .

2A0418,	Res. Aux. Trans, 2XR1 Supply BKR.	(SAT)/ UNSAT / NA
2A0417,	Switchgear AO4 Bus X-tie BKR.	SAT / UNSAT / NA
3A0418,	Res. Aux. Trans. 3XR1 Supply BKR.	(SAT) UNSAT / NA
3A0416,	Switchgear AO4 Bus X-tie BKR.	(SAT) UNSAT / NA
2A0618,	Res. Aux. Trans. 2XR2 Sup. BKR.	SAT / UNSAT / NA
2A0619,	Switchgear AO6 Bus X-tie BKR.	SAT/ UNSAT / NA
3A0618,	Res. Aux. Trans. 3XR2 Sup. BKR.	SAT)/ UNSAT / NA
3A0603,	Switchgear A06 Bus X-tie BKR.	(SAT)/ UNSAT / NA
affected Unit EDG should <u>no</u> unavailable	Circuit check is UNSAT, <u>then</u> REFER to t <u>and</u> Declare the associated Train ED ot be placed in Maintenance Lockout a for a real accident. The EDG is cons ill its function to sync to the 1E bu	G INOPERABLE. The INOPERABLE s this would make the EDG idered INOPERABLE because it
may not turn	11110310000100000000000000000000000000	a fat con an following a

during recovery from Loss of Offsite Power event. (ARs 020501290, 031000894-2)

STEP PERFORMED BY (INITIALS):

ATTACHMENT 1

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(b)(6)

or

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2.0 ACCEPTANCE_CRITERIA (Continued)

2.3 230 kV Electrical Distribution: [SR 3.8.1.1]

YES710/NA	At least two (2) offsite transmission lines connected to the offsite transmission network (switchyard) with at least one CB Closed on each OPERABLE 230 kV line (for independence, one line shall be from SCE and one line from SDG&E).	
	AND	
	Unit 2: At least two (2) physically independent transmission circuits between the offsite transmission network (switchyard) and the onsite Class 1E distribution system are OPERABLE.	
	AND	
	V Unit 3: At least two (2) physically independent transmission circuits between the offsite transmission network (switchyard) and the onsite Class 1E distribution system are OPERABLE.	
If NO, then REFER to Tech Spec. LCO 3.8.1 for both Units, and PERFORM the requirements of SO23-3-3.23, Attachment for A.C. Sources Verification.		
	(b)(6) STEP PERFORMED BY (INITIALS):	

CONTINUED ON NEXT PAGE

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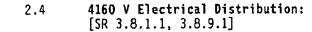
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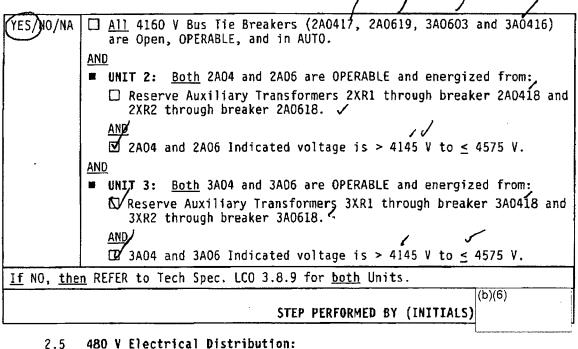
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SURVEILLANCE OPERATING INSTRUCTION REVISION 14 EC 14-4 ATTACHMENT 1

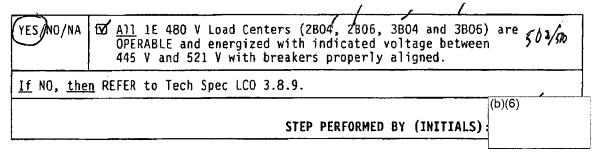
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2.0 ACCEPTANCE CRITERIA (Continued)





[SR 3.8.9.1]



END OF SECTION 2.5

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2.0 ACCEPTANCE CRITERIA (Continued)

2.6 Vital AC Buses:

YES/NA SR 3.8.7.1	NOTE: Electrical Test Personnel are authorized to adjust Inverter Output Voltages <u>after</u> the "As-Found" Inverter Output Voltages have been recorded.	
	 RECORD the "As-Found" Inverter Output Voltages obtained from Inverters and/or Electrical Test using a Fluke 187 V.O.M. or equivalent: (Enter N/A for voltage associated with any Out-Of-Service Inverter.) 	
	$\frac{121.8 \text{ Volts}}{2Y001} \text{ Volts} \frac{122.3 \text{ Volts}}{2Y002} \text{ Volts} \frac{121.5 \text{ Volts}}{2Y003} \text{ Volts} \frac{121.9 \text{ Volts}}{2Y004} \text{ Volts}$	
	<u>122.0</u> volts <u>121.8</u> volts <u>121.4</u> volts <u>121.1</u> volts <u>37001</u> <u>37002</u> <u>37003</u> <u>37004</u>	
	If any voltages are obtained from Electrical Test, then enter the name of the Technician:	
	Name of Electrical Test Tech DATE / TIME	
YES/NO/NA [1]	UNIT 2: <u>All</u> vital buses (2Y01, 2Y02, 2Y03 and 2Y04) are OPERABLE and energized by their associated inverters, with	
SR 3.8.9.1	the inverters powered from their respective DC buses <u>and</u> the Inverter Output Voltages are between 119.5 V and 125.0 V.	
	AND UNIT 3: <u>All</u> Vital buses (3Y01, 3Y02, 3Y03 and 3Y04) are OPERABLE and energized by their associated inverters, with the inverters powered from their respective DC buses <u>and</u> the Inverter Output Voltages are between 119.5 V and 125.0 V.	
[1] <u>If</u> NO, <u>t</u>	hen Refer to Tech. Spec. LCO 3.8.7 and LCO 3.8.9.	
<u>If</u> Inver	ter Output Voltage(s) are <u>not</u> between 119.5 V and 125.0 V, <u>then</u> :	
a) Initiate a LCOAR.		
b) Notify Electrical Test to adjust Inverter Output Voltages to obtain an "As-Left" voltage of between 121.0 V and 123.0 V.		
c) Write an AR against the associated Inverter(s).		
. d) Document the LCOAR Number, AR Number, "As-Found", and "As-Left" Inverter Voltages in the Comments Section.		
e) <u>If</u> 12	the "As-Left" Inverter Voltage(s) are between 121.0 V and 3.0 V, <u>then</u> CLOSE Out the associated LCOAR.	
	(b)(6) STEP PERFORMED BY (INITIALS):	

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SURVEILLANCE OPERATING INSTRUCTION REVISION 14 EC 14-4 ATTACHMENT 1

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2.0 ACCEPTANCE CRITERIA (Continued)

2.7 Vital DC Buses:

YES/NO/NA [2], [3] SR 3.8.4.1	UNIT 2: <u>All</u> DC buses (2D1, 2D2, 2D3 and 2D4) are OPERABLE and energized (indicated bus voltage > 129 VDC) by their respective battery banks and full capacity chargers <u>and</u> the associated breakers are properly aligned.
SR 3.8.9.1	AND
	UNIT 3: <u>All</u> DC buses (3D1, 3D2, 3D3 and 3D4) are OPERABLE and energized (indicated bus voltage ≥ 129 VDC) by their respective battery banks and full capacity chargers <u>and</u> the associated breakers are properly aligned.
[2] BOOX sat ONLY when	isfies the battery requirements for bus 2(3)D1 through 2(3)D4 n it is connected to that 125 VDC bus. (ECP 001000280-30)
or 2(3)D	<u>hen</u> REFER to Tech. Spec. LCO 3.8.4 and LCO 3.8.9. <u>If</u> 2(3)D1, 2 bus voltages are < 129 VDC, <u>then</u> also REFER to Tech. Spec. 1 for <u>both</u> Units (provides control power for the 4kv Bus Tie
	(b)(6)
	STEP PERFORMED BY (INITIALS)
COMMENTS:	
Surveillance co	ompleted 1-11-10-8/14:30 and log entry made.
	(b)(6)
PERFORMED BY:	
REVIEWED BY:	SRO Ops. Supr. DATE TIME
FILE DISPOSITIC	DN: File per SO123-0-A3.
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	JAN 21 2008
	(b)(6)