AP 1001

Form 1001-8

Three Mile Island Nuclear Station

Special Operating Procedure

SIDE 1

SOP No. Z-64 (From SOP Log Index)

Unit No. II

Date

NRC

NOTE: Instructions and guidelines in AP 1001 must be followed when completing this form.

1. Title NR-V51A/B JOG CONTROL

2. Purpose (include purpose of SOP)
BETTER TEMP CONTROL TO ICCW SYS.

3. Attach procedure to this form written according to the following format.
   A. Limitations and Precautions
      1. Nuclear Safety
      2. Environmental Safety
      3. Personnel Safety
      4. Equipment Protection
   B. Prerequisites
   C. Procedure

Attached

Generated by J. O. LAWTON Date 4-6-79

5. Duration of SOP - Shall be no longer than 90 days from the effective date of the SOP or (a) or (b) below — whichever occurs first.
   (a) SOP will be cancelled by incorporation into existing or new permanent procedure submitted by ☐
   (b) SOP is not valid after ☐
   (fill in circumstances which will result in SOP being cancelled)

6. (a) Is the procedure Nuclear Safety Related?
   If "yes", complete Nuclear Safety Evaluation. (Side 2 of this Form) . . . . . Yes ☐ No ☐
   (b) Does the procedure affect Environmental Protection?
   If "yes", complete Environmental Evaluation. (Side 2 of this Form) . . . . . Yes ☐ No ☐
   (c) Does the procedure affect radiation exposure to personnel? . . . . . Yes ☐ No ☐

   NOTE: If all answers are "no", the change may be approved by the Shift Supervisor. If any questions are answered "yes", the change must be approved by the Unit Superintendent.

7. Review and Approval
   Approved – Shift Supervisor — 4-7-79 Date
   NRC F.S.A. Reviewed – List members of PORC contacted — James L. Paulo 4/6/79 Date
   B&W — J. Brumore 4/7/79 — (RW) Bennett 4/7/79 Date
   ARA — 4/7/79 — John C. Chick 4/7/79 Date
   Approved - Unit Superintendent — 4/7/79 Date

8. SOP is Cancelled
   Shift Supervisor/Shift Foreman — Date

TMI-63 Rev. 8/77

REFERENCES: 3075, SH. 26

3033, SH. A8R, B1R

PROCEDURE:

1) ENSURE OPERATIONS PLACES VALVES IN The following desired position ~~POSITIONS THEY'RE SUPPOSED TO BE IN~~ PRIOR TO TAKING BREAKERS OUT OF SERVICE. All required

2) AT MCC 2-11EA/8BR, DE-ENERGIZE BREAKER FOR NR-V51A. All operations in radiation areas should be performed as rapidly as possible.

3)* IF IT IS POSSIBLE, REMOVE THE STARTER FROM THE COMPARTMENT AND TAKE IT TO A LOW RADIATION AREA TO BE MODIFIED BY AN ELECTRICIAN WHO IS NOT IMPEDED BY RADIATION CLOTHING AND APPARATUS. CHECK WITH HP TO FIND OUT IF THIS CAN BE DONE.

4) LIFT THE TWO WIRES #46 FROM TERMINAL 3 OF THE "OPEN" CONTACTOR, AND CONNECT THEM TO AN ADJACENT SPARE CONTACT TERMINAL. IF THERE IS ONLY ONE WIRE CONNECTED TO TERMINAL 3, LIFT IT, TAPE IT AND TAG IT.

5) REPEAT STEP 4 FOR TERMINAL 5 OF THE "CLOSE" CONTACTOR. FOR THIS STEP THE WIRES MIGHT HAVE #56 ON THEM.

6) IF STARTER WAS REMOVED, REPLACE STARTER AND RE-ENERGIZE BREAKER. IF STARTER WAS NOT REMOVED, RE-ENERGIZE BREAKER.

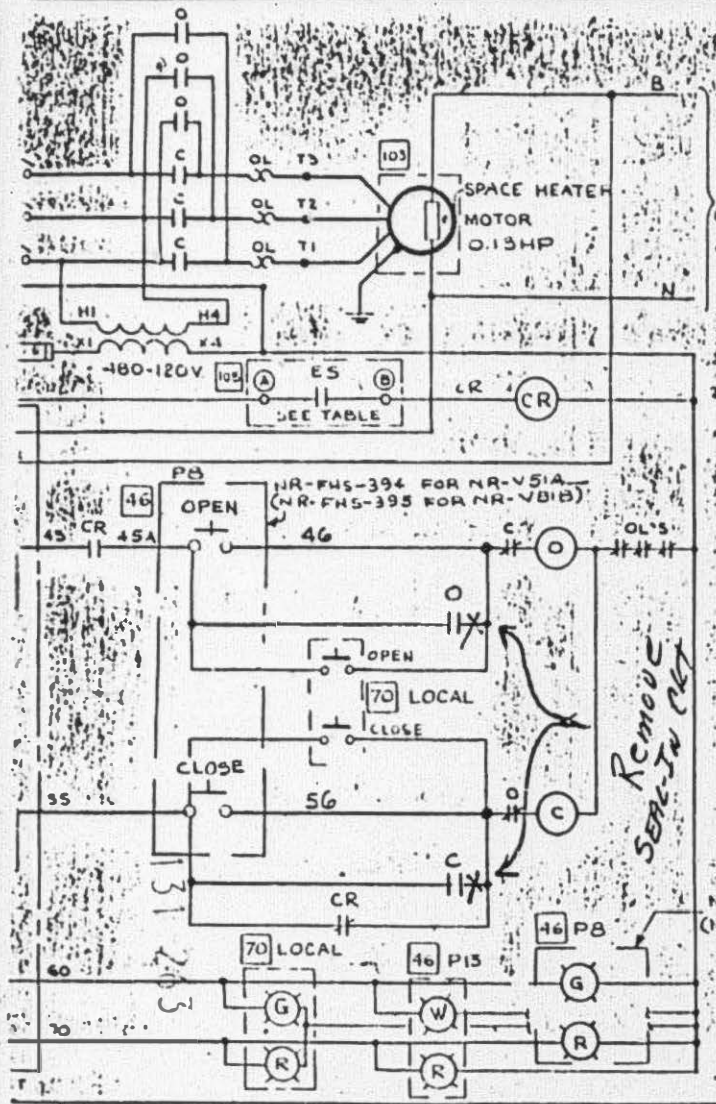
7) AT MCC 2-21EA/1BR, DE-ENERGIZE BREAKER FOR NR-V51B

131 262

8) REPEAT STEPS 3, 4, 5 AND 6.

) RECORD LIFTED LEADS IN "LIFTED LEAD LOG"

*IF BREAKER ASSEMBLY CANNOT BE REMOVED, HP to SURVEY AREA to ESTIMATE EXPOSURE AND CONTROL STAY TIME.



LIMIT SWITCH CONTACT DEVELOPMENT (NOTE 4)

LEGEND	CONTACT	VALVE FULL OPEN	INTERMEDIATE VALVE POSITION	VALVE FULL CLOSED	CONTACT FUNCTION
20-O	1	CLOSED	OPEN	OPEN	BY PASS CIR
20-O	2	CLOSED	OPEN	OPEN	SPARE
20-IC	3	OPEN	CLOSED	CLOSED	IND LIGHT
20-IC	4	OPEN	CLOSED	CLOSED	OPEN LIMIT
20-C	5	OPEN	OPEN	CLOSED	BY PASS CIR
20-C	6	OPEN	OPEN	CLOSED	SPARE
20-IO	7	CLOSED	CLOSED	OPEN	IND LIGHT
20-IO	8	CLOSED	CLOSED	OPEN	[illegible]

NUCLEAR SAFETY RELATED

NOTES:

1) CLOSING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURRING CLOSING CYCLE OR F CLOSED VALVE.
2) OPENING TORQUE SWITCH INTERRUPTS CONTROL CIRCUIT IF MECHANICAL OVERLOAD OCCURS DURRING OPENING CYCLE.
3) ALL WORK SHOWN ON THIS DWG. IS FURNISHED UNDER SPEC 2555-45 EXCEPT AS NOTED.
   XX BRACKETED AREA INDICATES WORK UNDER SPEC. 2555-XX.
4) DEVELOPMENT OF LIMIT SWITCH CONTACTS 9-16 IS SIMILAR TO CON 1-8 EXCEPT WITH ADJUSTABLE INTERMEDIATE ACTUATION POSIT CONTACTS 9-16 ARE SPARE UNLESS OTHERWISE NOTED.
5) COLOR CODING OF EXTERNAL POWER & CONTROL CABLES
   NR-V51A ——— ▲ (RED)
   NR-V51B ——— ■ (GREEN)

VALVE CLOSES ON ES.

VALVE	M.C.C.	E.S. CONTACT (A)	E.S. CONTACT (B)	CABINET	DWG.	BLOCK DIAGRAM	WIRE NO B	WIRE NO N
NR-V51A	2-11EA/8BR	RBA 147	RBA 148	198	3091 SH.6B	3023 SH.1H	B30	N30
NR-V51B	2-21EA/1BR	RBB 145	RBB 146	202	3091 SH.16B	3023 SH.2G	B23	N23

CONTROLLED COPY

APPROVED BY CLIENT

NOT REQ'D

RECEIVED U.E.&C. INC. JUL 08 1976 ENGINEERING DEPARTMENT

BURNS AND ROE, INC.
ORADELL, N.J. HEMPSTEAD, N.Y. LOS ANGELES, C

480 V MOTOR CONTROL CENTER
NUCLEAR SERV. RW PUMP 10 [illegible]

JERSEY CENTRAL POWER & LIGHT CO.
THREE MILE ISLAND STATION—UNIT 2

DRAWN / TRACED / CHECKED — REVISED LEADER — DATE — SCALE

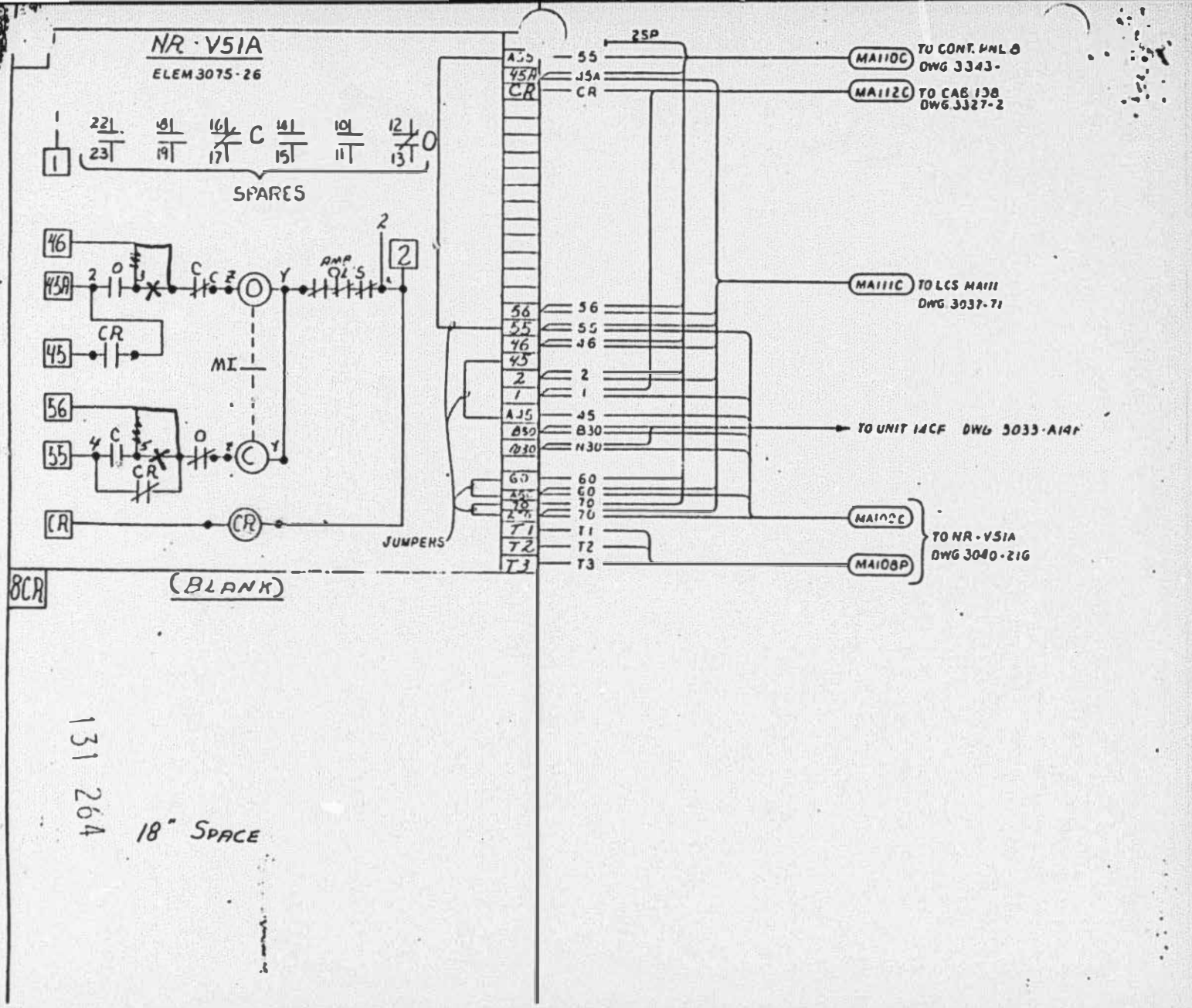
APPROVED FOR CONSTRUCTION

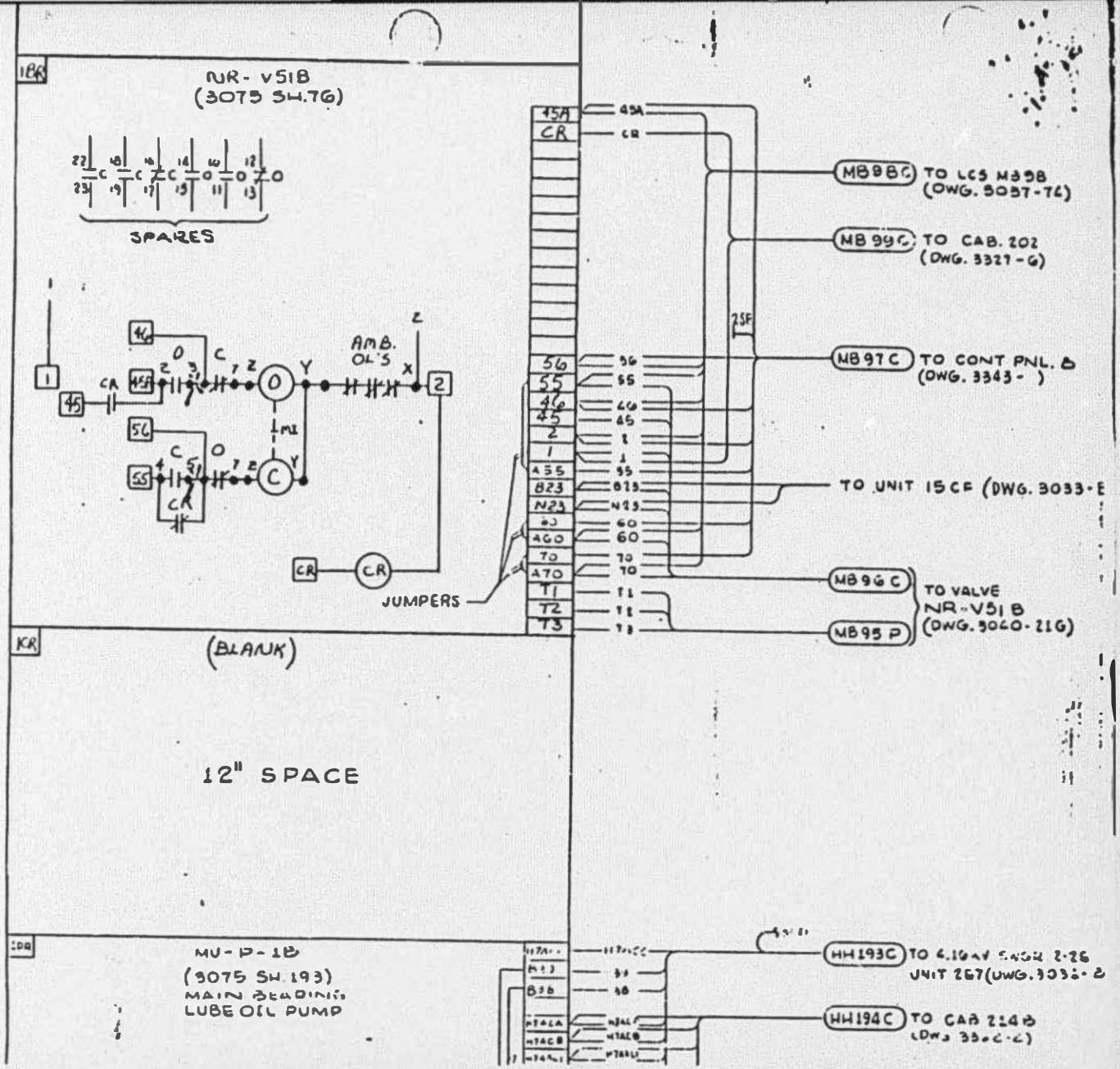
CHIEF ELECTRICAL ENGINEER

W.O. 255

DWG 3075 SH. 2

REV. NO	REVISIONS	APP BY CLIENT	BY	CHKD	APP	DATE
[illegible]	[illegible] REVISED TABLE [illegible]	~	A.T.L.	S.S.C.	[illegible]	[illegible]
[illegible]	REVISED TABLE, ADDED WIRE NOS. FOR SPACE HEATER PER PCN 2116	—	A.S.C.	[illegible]	[illegible]	[illegible]
[illegible]	ADDED NOTE 4 & NOTE TO SPACE HEATER PER PCN 2266	—	S.I.	S.S.C.	[illegible]	[illegible]


NR · V51A
ELEM 3075-26
SPARES
JUMPERS
(BLANK)
8CR
25P
MA110C TO CONT. PNL 8 DWG 3343-
MA112C TO CAB 138 DWG 3327-2
MA111C TO LCS MA111 DWG 3037-71
TO UNIT 14CF DWG 3033-A14F
MA100C
MA108P
TO NR-V51A DWG 3040-21G
131 264
18" SPACE



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THIS DRAWING HAS BEEN
CHECK ADMINIST
FILE FOR