

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 9994

FILE: _____

FROM: Carolina Power & Light Co. Raleigh, N.C. E.E. Utley			DATE OF DOC 9-17-75	DATE REC'D 9-19-75	LTR xxx	TWX	RPT	OTHER
TO: Mr. Robert W. Reid			ORIG 3-signed	CC	OTHER	SENT NRC PDR <u>xxx</u> SENT LOCAL PDR <u>xxx</u>		
CLASS	UNCLASS xxx	PROP INFO	INPUT	NO CYS REC'D 40		DOCKET NO: 50-261		

DESCRIPTION:

Ltr from the following:

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME:

H.B. Robinson #2

ENCLOSURES:

- 1- Typical Control Wiring Diagram Fig- 1
- 2- Proposed Control Wiring Diagram For Locked Valve Fig-2
- 3- Table I Valve List

FOR ACTION/INFORMATION

9-22-75 JGB

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INTERNAL DISTRIBUTION

REG FILE	<u>TECH REVIEW</u>	DENTON	<u>LIC ASST</u>	<u>A/T IND</u>
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OGC, ROOM P-506A	MACCARY	GAMMILL	H. GEARIN (L)	SALTZMAN
GOSSICK/STAFF	KNIGHT	KASTNER	E. GOULBOURNE (L)	MELTZ
CASE	PAWLICKI	BALLARD	P. KREUTZER (E)	
GIAMBUSSO	SHAO	SPANGLER	J. LEE (L)	<u>PLANS</u>
BOYD	STELLO		M. RUSHBROOK (L)	MCDONALD
MOORE (L)	HOUSTON	<u>ENVIRO</u>	S. REED (E)	CHAPMAN
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SKOVHOLT (L)	ROSS	DICKER	S. SHEPPARD (L)	E. COUPE
GOLLER (L) (Ltr)	IPPOLITO	KNIGHTON	M. SLATER (E)	PETERSON
P. COLLINS	TEDESCO	YOUNGBLOOD	H. SMITH (L)	HARTFIELD (2)
DENISE	<u>J. COLLINS</u>	REGAN	S. TEETS (L)	KLECKER
REG OPR	LAINAS	PROJECT LDR	G. WILLIAMS (E)	EISENHUT
FILE & REGION (2)	BENAROYA	<u>DITTMAN</u>	V. WILSON (L)	WIGGINTON
MIPC	VOLLMER	HARLESS	R. INGRAM (L)	<i>URGAL</i>
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EXTERNAL DISTRIBUTION

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Carolina Power & Light Company

Regulatory

File Cy.

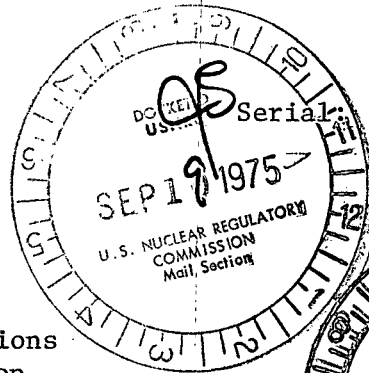
September 17, 1975

File: NG-3514 (R)

Mr. Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Reactor Licensing
Office of Nuclear Reactor Regulations
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

50-261

Dear Mr. Reid:



H. B. ROBINSON UNIT NO. 2
LICENSE NO. DPR-23
LOCKOUT OF CRITICAL ECCS VALVES

On July 24, 1975, Carolina Power & Light Company submitted additional information to aid your staff in reviewing our ECCS evaluation for the H. B. Robinson Plant. In that submittal, we identified certain valves in the Safety Injection and Residual Heat Removal Systems that would be de-energized in their normal position during plant operation to prevent spurious operation or operator error following a Loss of Coolant Accident (LOCA). The method of accomplishing this de-energization would be to lock open the valve motor breakers at their respective Motor Control Centers (MCC's). Since post-accident operation of some of these valves is necessary to realign systems for changeover from the injection to the recirculation phase of post-accident core flooding, a plant operator would be required to unlock and close the valve motor breaker, allowing the valve to be actuated normally from the Main Control Board (RTGB).

This method of controlling these valves following a major event such as a LOCA is clearly less desirable than having all control of the valves centralized in the control room under the supervision and direction of the Senior Reactor Operators and the Shift Foreman. Thus, in the July 24 submittal we identified our intention to perform a plant modification to the valve motor control circuitry to enable control from the control room and still satisfy the criteria for single failure or operator error, employing local breaker lockout at the MCC's only as an interim measure. As a result, we have designed a modification, described below and in the attached material, which we believe meets the intent of your requirements. We hereby submit it for your review and approval in accordance with discussions held with your staff.

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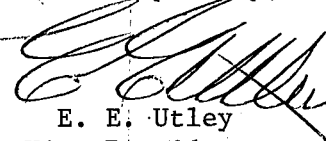
September 17, 1975

The proposed modification will require the use of one key switch per valve. This is permitted by a wiring design in which no single electrical failure could create an inadvertent valve operation, while the key switch prevents inadvertent operator action. The attached Figure 1 shows a typical Control Wiring Diagram for a valve motor operator as presently configured, and Figure 2 shows the proposed addition of the key switch and associated wiring.

The cables for all the valves listed in attached Table 1 would be run as a multiconductor cable from the terminal block at the respective MCC's to key switches mounted on the RTGB. Another multiconductor cable would be run from the RTGB to the auxiliary panel, where each conductor would be attached to the ground of the appropriate valve, as shown in Figure 2. A failure of either of the two cables, by shorting or severing, would not result in the bypass of the key switch or actuation of the valve. A short of the key switch itself would unlock the valve, but operation of the valve would be prevented by the manual switch. Periodic checks of the key switches will be performed during each refueling outage to assure their operability. Flame retardant wiring or wire coating will be used in the modification.

It is our intention to install this modification during the upcoming November refueling outage pending the availability of suitable material and your approval. We, therefore, request your prompt attention to this submission so that your approval may be obtained and we may proceed with scheduling of the work involved and purchase of material. The Plant Nuclear Safety Committee has reviewed this proposed modification and has indicated its approval.

Yours very truly,

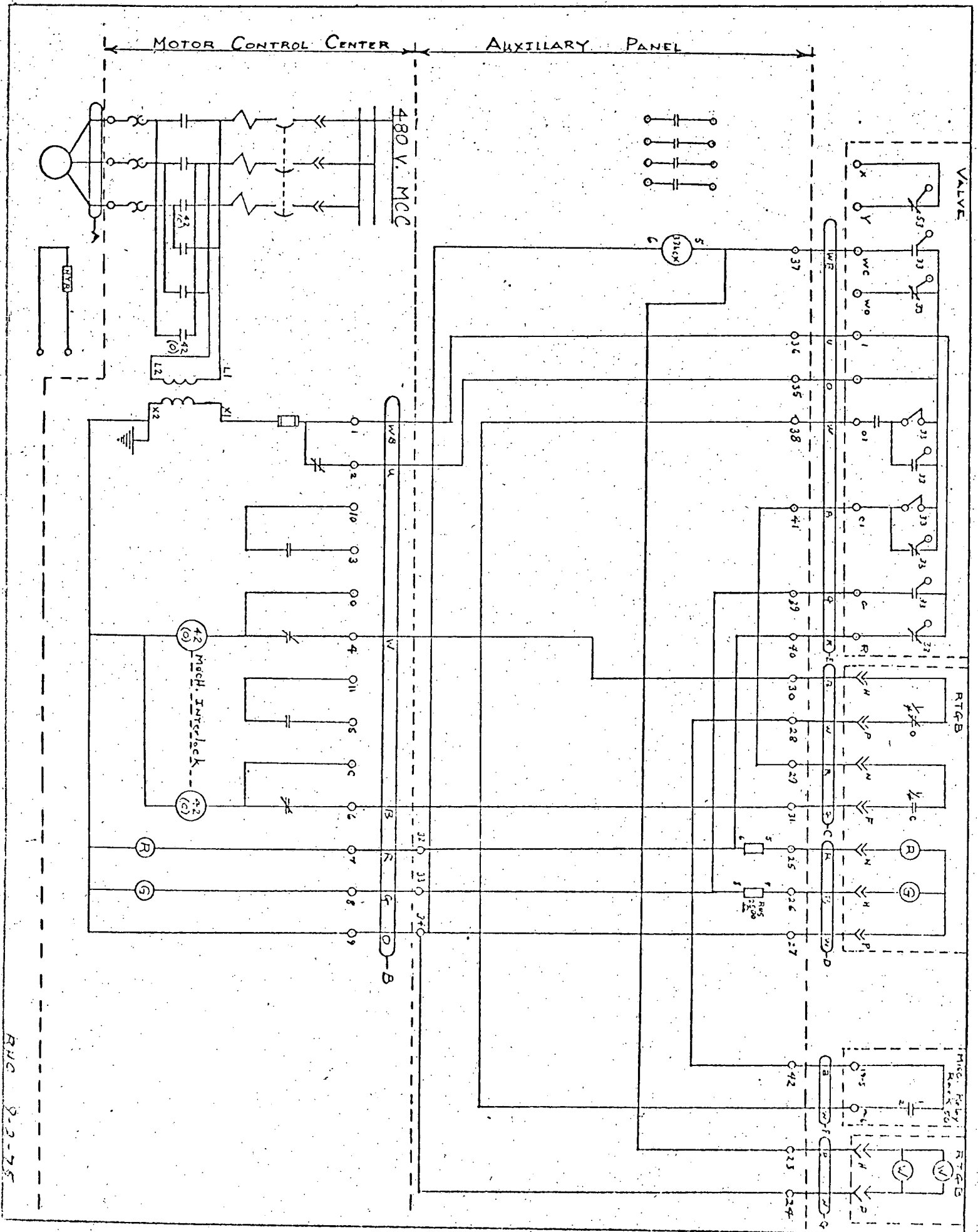


E. E. Utley
Vice-President
Bulk Power Supply

DBW:mc
Attachments

cc: Messrs. H. R. Banks
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FIGURE 1



RHC 8-2-75

PROPOSED CONTROL WIRING DIAGRAM
FOR LOCKED VALVE
FIGURE 2

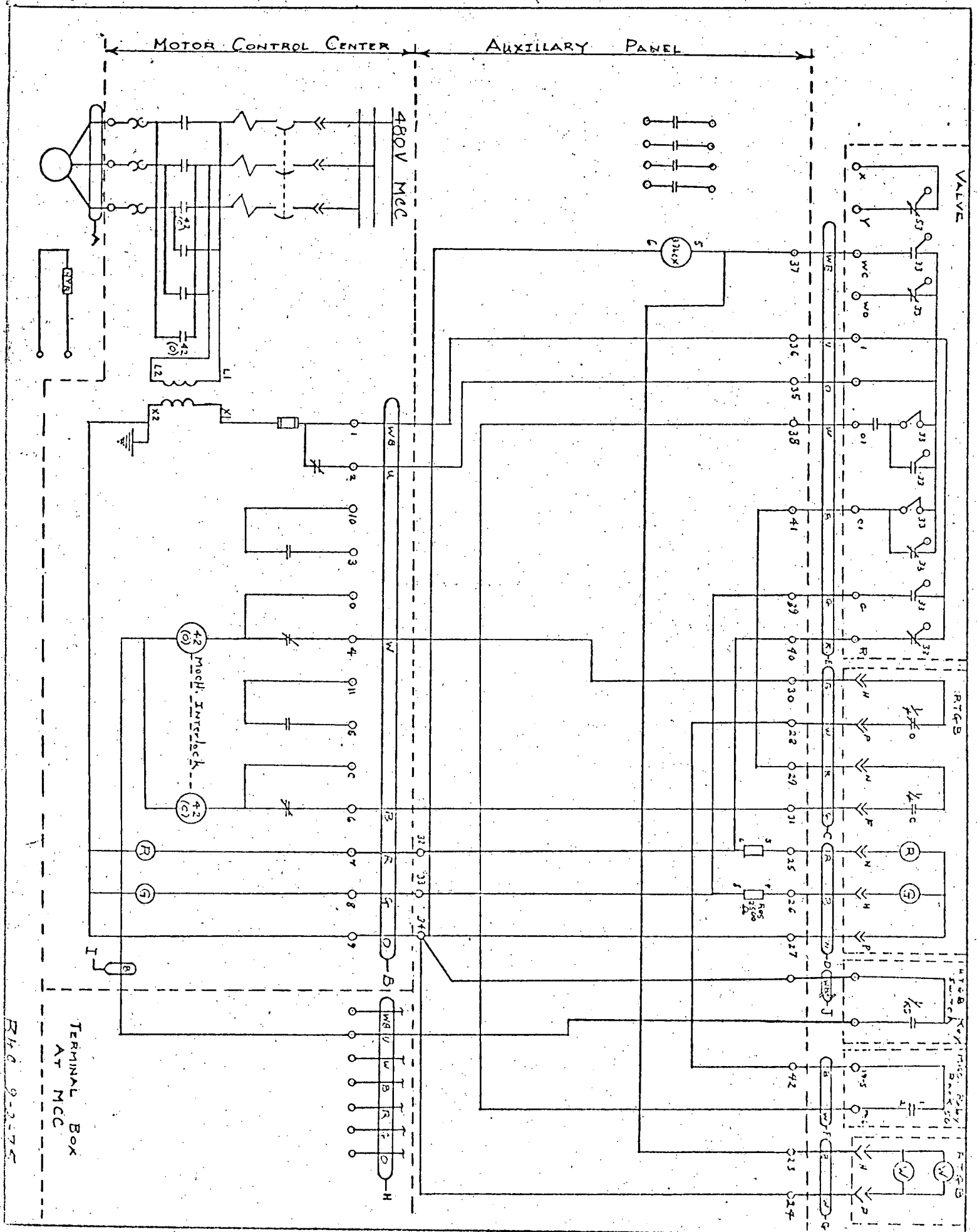


TABLE I
VALVE LIST

862 A & B	RHR suction from RWST
863 A & B	RHR discharge to RWST
864 A & B	SI supply from RWST
865 A, B, & C	Accumulator discharge
866 A & B	Hot leg SI
869	Hot leg SI
878 A & B	Si pump cross-connect