

58-261

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

TO:

Mr. A. Schwencer

FROM:

CP&L
Raleigh, N.C. 27602
E. E. Utley

DATE OF DOCUMENT

05/16/78

DATE RECEIVED

05/19/78

☒ LETTER☐ NOTORIZED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED

☒ ORIGINAL
☐ COPY☒ UNCLASSIFIED

1516NEW

DESCRIPTION

ENCLOSURE

Response to NRC request of 04/10/78
...Furnishing info concerning Subject Facility's
overpressure protection system...w/att drawings

2p + 5p

REACTOR VESSEL OVERPRESSURIZATION
DISTRIBUTION PER G. ZECH 10-21-76

PLANT NAME: H. B. ROBINSON UNIT 2
jcm 06/01/78

Dist Per C. Parrish 5/31/78

12 ENCL / TO THOSE INDICATED
ALL OTHERS RECEIVE

SAFETY

FOR ACTION/INFORMATION

Ltr only

BRANCH CHIEF: (5) LTR'S SCHWENCER

LIG. ASST:

PROJECT MANAGER:

INTERNAL DISTRIBUTION

REG FILE W/ENCL

NRC PDR W/ENCL

I & E (2) W/2 ENCL

OELD

GOSSICK & STAFF

BOSNAK W/ENCL

PAWLICKI W/ENCL

NOVAK W/ENCL

EISENHUT

SHAO W/ENCL

BAER W/ENCL

BUTLER W/ENCL

ZECH

NEIGHBOR'S W/ENCL

EXTERNAL DISTRIBUTION

CONTROL NUMBER

LPDR: W/ENCL - HARTSVILLE

TIC:

NSIC:

ACRS 16 LTR'S HOLDING/SENT TO LA CAT B

781520120



Carolina Power & Light Company

REGULATORY DOCKET FILE COPY

May 16, 1978

FILE: NG 3514 (R)

SERIAL: GD 78 1374

Office of Nuclear Reactor Regulation
ATTN: Mr. A. Schwencer, Chief
Operating Reactors Branch No. 1
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

H.B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

DOCKET NO. 50-261

LICENSE NO. DPR-23

RESPONSE TO OVERPRESSURE PROTECTION QUESTIONS

US NRC
DISTRICT SERVICES
BRANCH

1978 MAY 19 PM 2 00

RECEIVED DISTRIBUTION
SERVICES UNIT

Dear Mr. Schwencer:

Your letter of April 10, 1978 transmitted several additional questions concerning the unit overpressure protection system. CP&L's responses to your questions are given below.

QUESTION 1

The attached H. B. Robinson Plant Control Wiring Diagrams numbered 119 and 120 show the other control functions. This is consistent with CP&L procedure to use one wiring diagram for each complex function of a multifunction device. Hence, the Overpressure Wiring Diagram in our previous submittals shows only that complex function.

QUESTION 2

A clearer representation would be given by the "operate" input to annunciator being drawn from the AND gate preceeding the OR gate shown.

Other annunciators are used for the high pressure valve actuating circuitry. Warning of high pressure conditions prior to an actual valve lift is given by annunciators A3-23, A3-32, A3-30, A3-38, and A3-16. Actual lift is indicated by A3-8, "Pressurizer Protection, High Pressure."

QUESTION 3

Reflash is used on multiple input alarm windows. An alarm condition is represented by an audible two-tone warble and lighting of the alarm window in a flashing mode. Acknowledgement of the alarm silences the audible and changes the alarm window to a non-flashing constant light. If a second (or third or fourth) alarm occurs while the preceeding alarm is acknowledged, the audible tone recurs as well as the flashing light. The alarm light cannot be extinguished until all alarms have been cleared.

781520120

QUESTION 4

Connections to the equipment racks are made on terminal strips in separate compartments. The cables are routed via separate cable trays. The lamps are housed in separate compartments in the annunciator panel. Circuit isolation between inputs to an annunciator is accomplished both by transformer circuitry and resistance isolation in each circuit; i.e. two isolating methods per input.

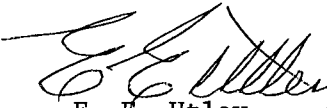
QUESTION 5

The mechanical equipment of the overpressure protection system has been designed and installed to meet the Seismic Class I requirements of the Robinson site. The electrical components are identical in specification to the current reactor protection system instrumentation.

QUESTION 6

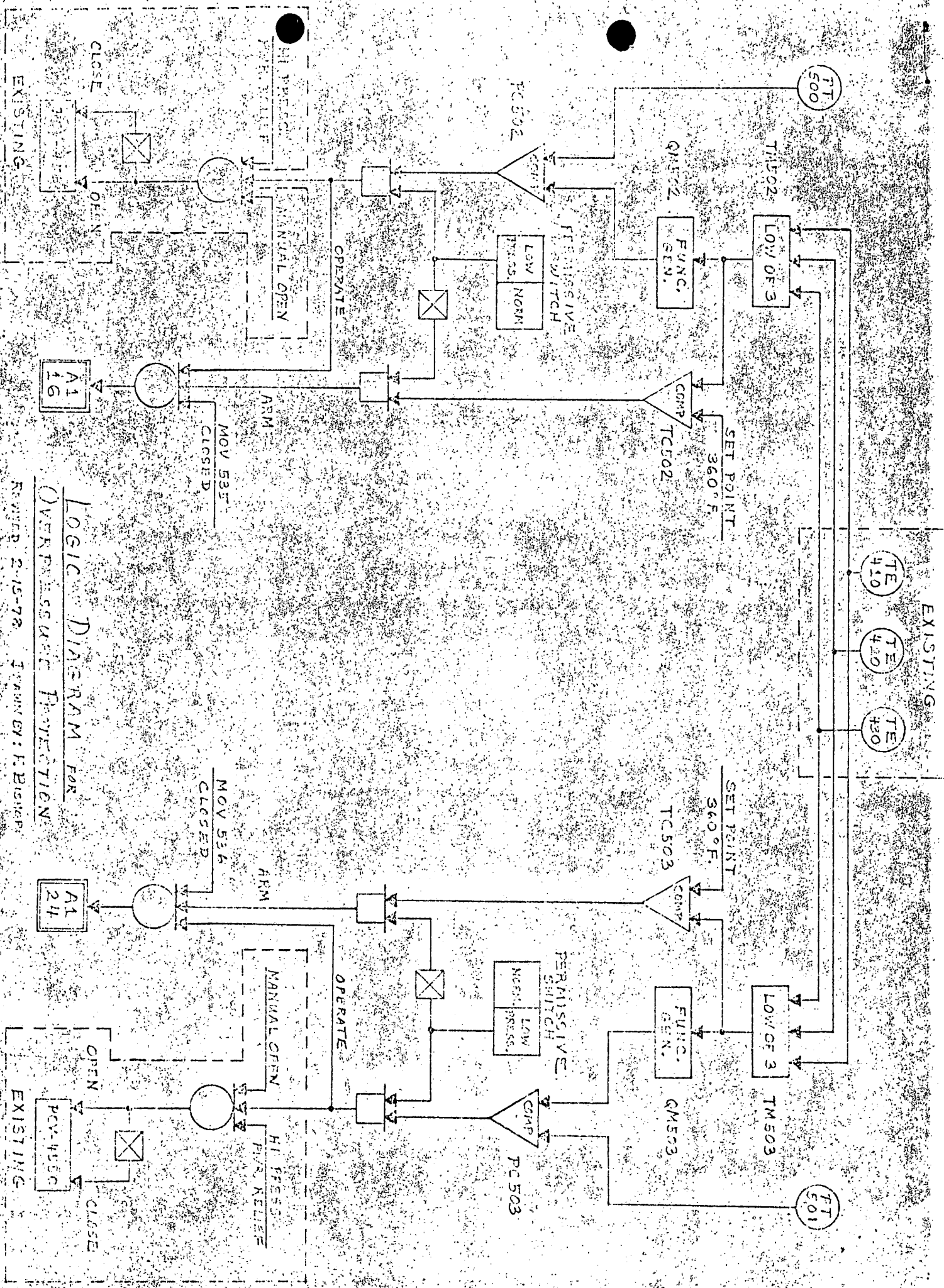
Loss of offsite power would result in the momentary inability of the PORV's to operate automatically; however, automatic operation capability would be regained as soon as the emergency diesels start and come up to speed. Since the diesels are required to start and accept full load in less than 50 seconds, the period without automatic actuation is not significant. At all times it is possible for the operator to control the PORV's manually from the control board since the control circuit power comes from the station batteries.

Yours very truly,


E. E. Utley
Senior Vice President
Power Supply

CSB/gsm

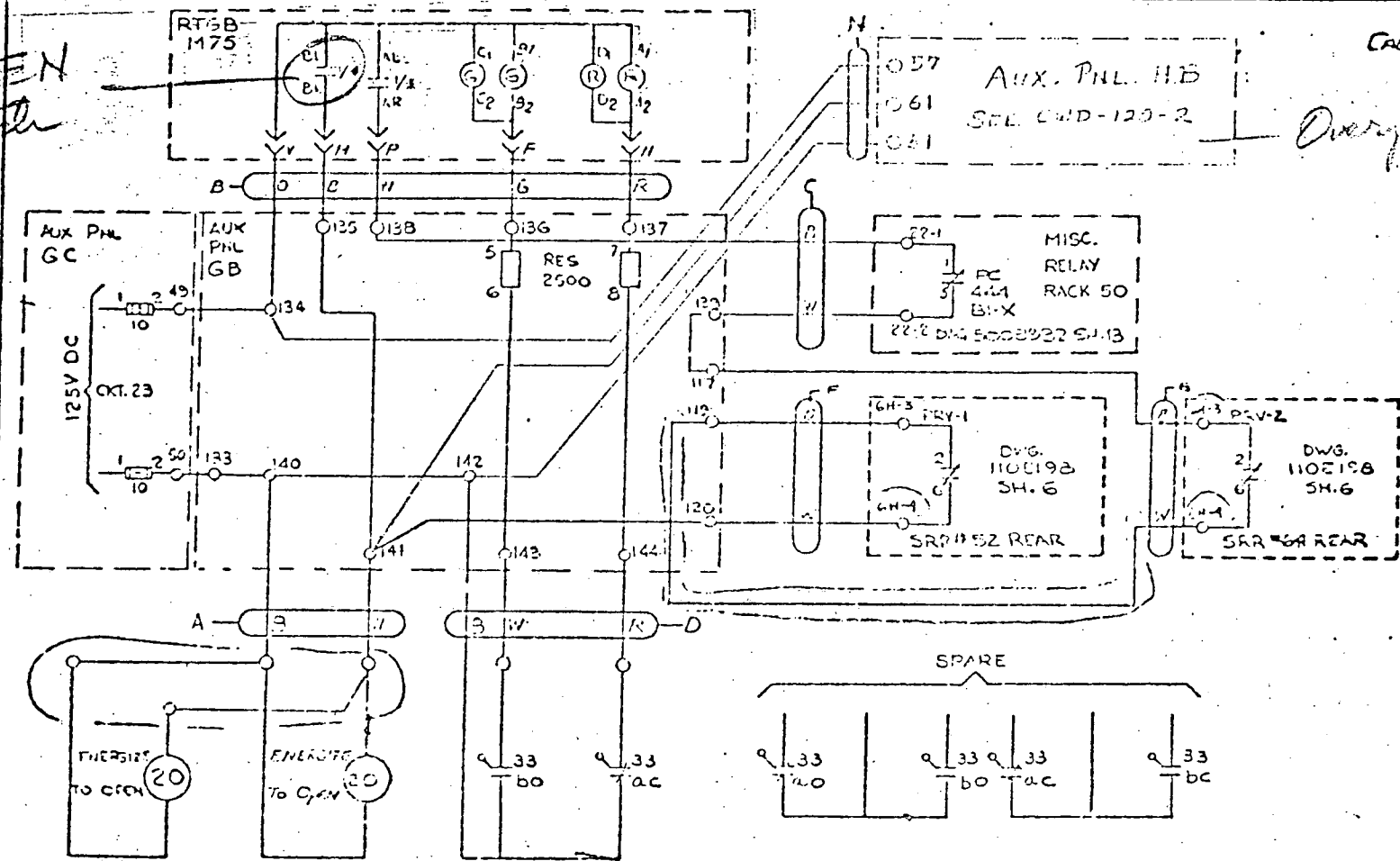
Attachment



LOGIC DIAGRAM FOR
OVERTEMP PROTECTION

REVISED 2-15-78 DRAWN BY: HEBEN

OPEN Switch



CABLE ROUTE II

AUX. PHL. HB
SEE DWG-120-2

Overpressure

NOTE

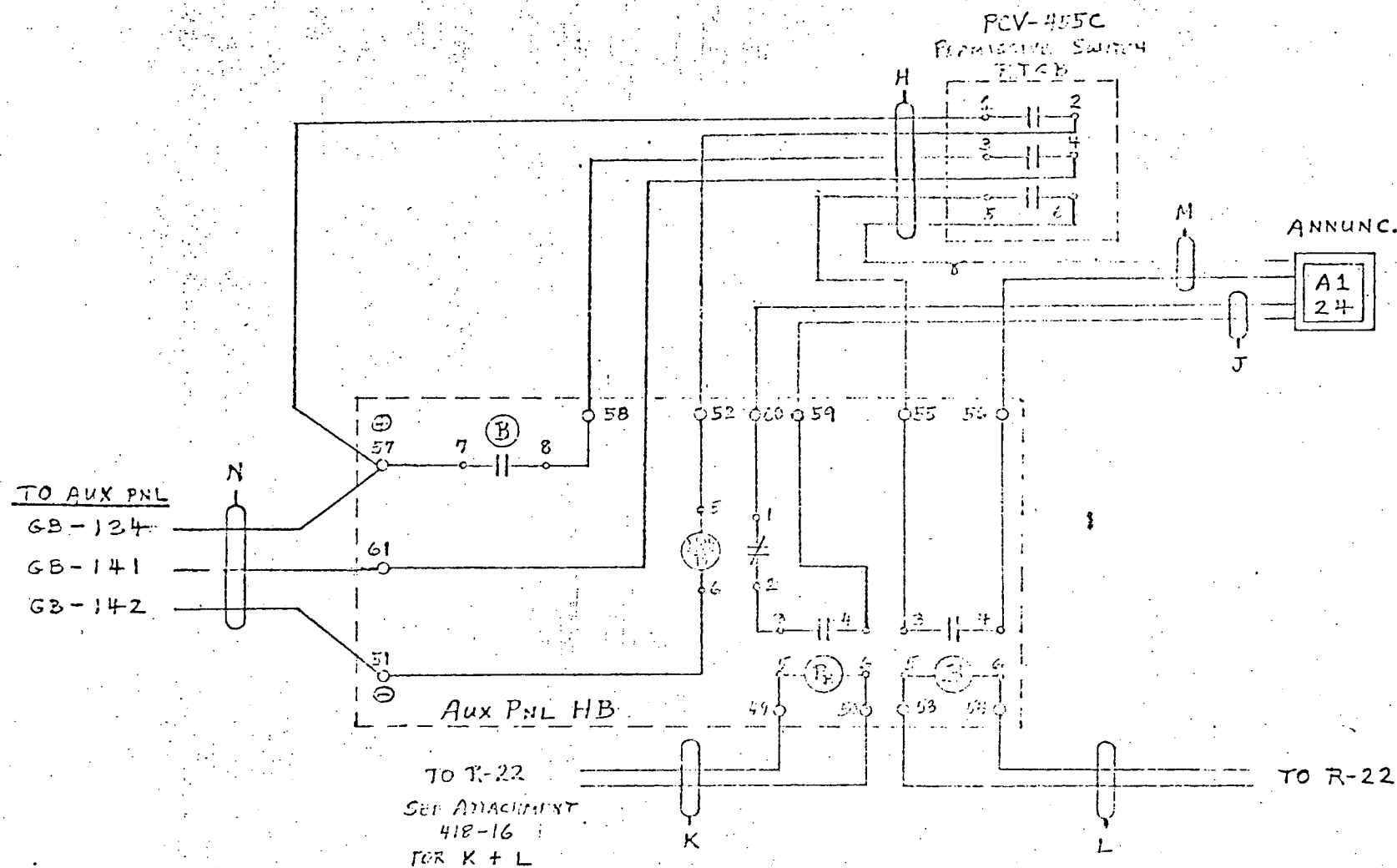
VALVE SHOWN IN FULL OPEN POSITION

1/2 SEE SWITCH DEV. No. 15. SHT. No. 37 * = VALVE No. DET. D.

Westinghouse Electric Corporation										500B 452	
TITUS CATHODE POWER & LIGHT CO.										SHEET 120-1	
115 ROUTING STEAM PLANT - UNIT NO. 1											
ELEMENTARY WIRING DIAG. PER REV. 1											
SHEET 120-1											
ATOMIC POWER DIV.										PITTSBURGH, PA. U.S.A.	

* Circuits behind these relays drive other announcements
These are 2/3 High Pressure control

ATTACHMENT 418-5 (REV-1)
Frank Bishop 2-15-78
SHEET 1 OF 2



PAR RELIEF VLV 455C

500 B 452

SHEET-120-2

REV-15

ATTACHMENT 418-5 SHT. 2 OF 2

OPEN Switch

Overpressure Annunciator



NOTE

VALVE SHOWN IN FULL OPEN POSITION.
V/A SEE SWITCH DES NO. 18, SHIT NO. 37 R=VALVE NO.

6	5	4	3	2	1	SUB
ECM-1001	ECM-1002	ECM-1003	ECM-1004	ECM-1005	ECM-1006	ECM-1007
DRG-1001	DRG-1002	DRG-1003	DRG-1004	DRG-1005	DRG-1006	DRG-1007

WESTINGHOUSE ELECTRIC CORPORATION	ATOMIC POWER DIV.
THE CAROLINA POWER & LIGHT CO.	
115 FORD ST. STEAM PLANT UNIT NO. 2	
TEMPERARY WIRING DIAG.	
5006452	
SHEET 119	
PITTSBURGH, PA., U.S.A.	

*1404/142 are same plant B
Boeing signature*

*A circuit behind these relay drive other components
These are 3/3 High Pressure control*

ATTACHMENT 418-9 (REV-1)
Fuel Budy 2-15-78

