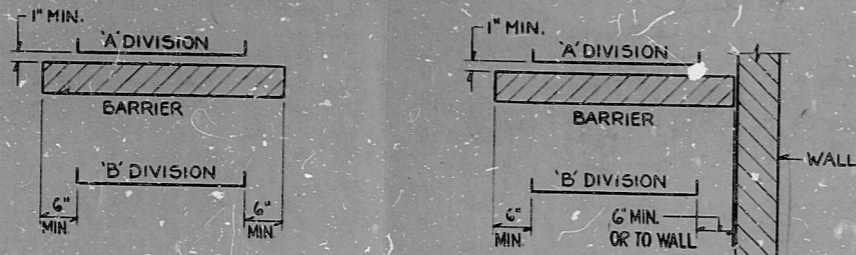


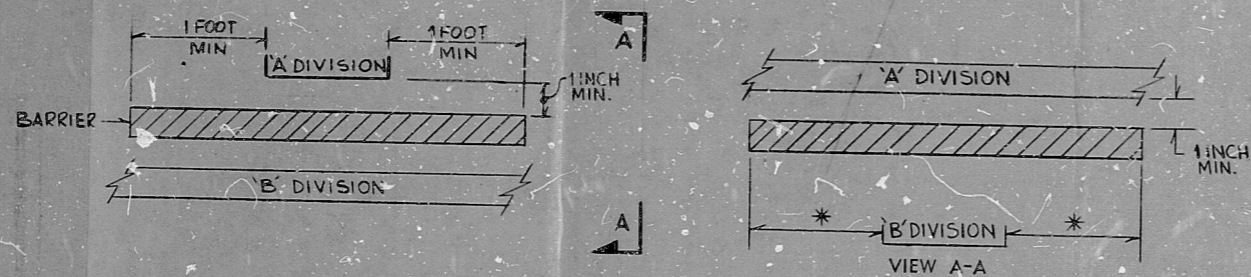
5.0 SEPARATION (CONT'D)

WHEN MINIMUM VERTICAL SEPARATION REQUIREMENTS CANNOT BE MET, BETWEEN SAFETY DIVISIONS, AND BETWEEN SAFETY AND NON-SAFETY DIVISIONS, BARRIERS, ALTHOUGH NOT PREFERRED ARE ACCEPTABLE. THE BARRIERS SHALL BE UTILIZED IN ACCORDANCE WITH FIGURES 6 & 7.



EXAMPLE OF ACCEPTABLE ARRANGEMENT WHERE VERTICAL SEPARATION DISTANCE CANNOT BE MAINTAINED BETWEEN SAFETY DIVISIONS AND BETWEEN SAFETY AND NON-SAFETY DIVISIONS.

FIGURE 6



* 1 FOOT MIN. FOR CABLE VAULT OR 3 FOOT MIN. FOR GENERAL PLANT AREAS.

EXAMPLE OF ACCEPTABLE ARRANGEMENT WHERE VERTICAL SEPARATION DISTANCE CANNOT BE MAINTAINED BETWEEN SAFETY DIVISIONS, AND BETWEEN SAFETY AND NON-SAFETY DIVISIONS.

FIGURE 7

TYPICAL SEPARATION ARRANGEMENT BETWEEN ASSOCIATED CIRCUITS, SAFETY CIRCUITS & NON-SAFETY CIRCUITS SHALL BE IN ACCORDANCE WITH FIGURE 8

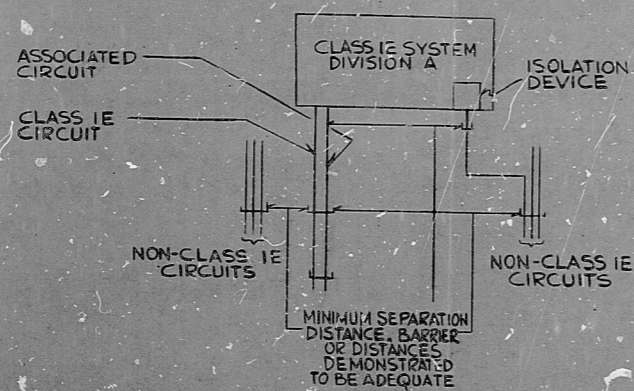


FIGURE 8

EXAMPLES OF ACCEPTABLE CIRCUIT ARRANGEMENTS

03 CONTROL ROOM & CABLE VAULT - CABLE TRAY

REDUNDANT CABLE SPREADING AREAS SHALL BE UTILIZED. THE CABLE SPREADING AREA AND MAIN CONTROL ROOM SHALL NOT CONTAIN HIGH ENERGY EQUIPMENT SUCH AS SWITCHGEAR, TRANSFORMERS, ROTATING EQUIPMENT OR POTENTIAL SOURCES OF MISSILES OR PIPE WHIP AND SHALL NOT BE USED FOR STORING FLAMMABLE MATERIALS. CIRCUITS IN THE CABLE SPREADING AREA AND MAIN CONTROL ROOM SHALL BE LIMITED TO CONTROL FUNCTIONS, INSTRUMENT FUNCTIONS AND THOSE POWER SUPPLY CIRCUITS OR FACILITIES SERVING THE CONTROL ROOM AND INSTRUMENT SYSTEMS.

POWER SUPPLY FEEDERS TO INSTRUMENT & CONTROL DISTRIBUTION PANELS IN CONTROL ROOM SIZED #10 AWG OR SMALLER WILL BE ROUTED IN TRAYS. FEEDERS #8 AWG AND LARGER WILL BE ROUTED IN CONDUIT. THE MINIMUM SEPARATION DISTANCE BETWEEN REDUNDANT CLASS 1E CABLE TRAYS OR BETWEEN REDUNDANT AND NON-CLASS 1E CABLE TRAYS SHALL BE ONE (1) FOOT BETWEEN TRAYS SEPARATED HORIZONTALLY AND THREE (3) FEET BETWEEN TRAYS SEPARATED VERTICALLY. WHERE TERMINATION ARRANGEMENTS PRECLUDE MAINTAINING THE MINIMUM SEPARATION DISTANCE, THE REDUNDANT CIRCUITS SHALL BE SEPARATED BY BARRIERS (SEE FIGURES 3, 4 & 7). THE MINIMUM SEPARATION DISTANCE BETWEEN NON-CLASS 1E CABLE TRAYS SHALL BE ONE (1) FOOT BETWEEN TRAYS SEPARATED HORIZONTALLY AND THREE (3) FEET BETWEEN TRAYS SEPARATED VERTICALLY. WHERE TERMINATION ARRANGEMENTS PRECLUDE MAINTAINING THE MINIMUM SEPARATION DISTANCE, THE CIRCUITS SHALL BE SEPARATED BY THE UTILIZATION OF SOLID TRAYS & TRAY COVERS (SEE FIGURES 4 & 5). HORIZONTAL SEPARATION IS PREFERRED TO VERTICAL SEPARATION.

04 SEPARATION CODES

- NA - NON-SAFETY SYSTEM A
- NB - NON-SAFETY SYSTEM B
- NA/NB - COMBINED NON-SAFETY SYSTEMS A & B
- SA - SAFETY RELATED SYSTEM A
- SB - SAFETY RELATED SYSTEM B
- SC - SAFETY RELATED SYSTEM C
- SD - SAFETY RELATED SYSTEM D
- SAB - COMBINED SAFETY RELATED SYSTEMS
- ASA - ASSOCIATED SAFETY RELATED SYSTEM A
- ASB - ASSOCIATED SAFETY RELATED SYSTEM B
- ASC - ASSOCIATED SAFETY RELATED SYSTEM C
- ASD - ASSOCIATED SAFETY RELATED SYSTEM D
- SMA - SAFETY MEASUREMENT CHANNEL A
- SMB - SAFETY MEASUREMENT CHANNEL B
- SMC - SAFETY MEASUREMENT CHANNEL C
- SMD - SAFETY MEASUREMENT CHANNEL D
- ASMA - ASSOCIATED SAFETY MEASUREMENT CHANNEL A
- ASMB - ASSOCIATED SAFETY MEASUREMENT CHANNEL B
- ASMC - ASSOCIATED SAFETY MEASUREMENT CHANNEL C
- ASMD - ASSOCIATED SAFETY MEASUREMENT CHANNEL D
- SMBR - SAFETY MEASUREMENT CHANNEL B REACTOR PROTECTION EXCORE MONITOR
- SMBR - SAFETY MEASUREMENT CHANNEL B REACTOR PROTECTION EXCORE MONITOR
- SMCP - SAFETY MEASUREMENT CHANNEL C REACTOR PROTECTION EXCORE MONITOR
- SMDR - SAFETY MEASUREMENT CHANNEL D REACTOR PROTECTION EXCORE MONITOR
- EXA - NON-SAFETY START-UP & CONTROL A EXCORE MONITOR
- EXB - NON-SAFETY START-UP & CONTROL B EXCORE MONITOR

THE DESIGNATION SN IS USED ON MECHANICAL EQUIPMENT WHICH IS SEISMIC CLASS I BUT NOT ELECTRICAL CLASS 1E.

PRC APERTURE CARD

EBASCO SERVICES INCORPORATED			WASHINGTON PUBLIC POWER SUPPLY SYSTEM		WPPSS QUALITY CLASS I, II & G	
DIV. ELECT. DR. E.M.			NUCLEAR PROJECTS NO. 3 & 5		WPPSS 3240	
CH. R. ABRAMOWITZ			GENERAL NOTES, SYMBOLS AND REFERENCE DRAWINGS		D-502	
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1	4-10-79	ES	[Signature]			

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