

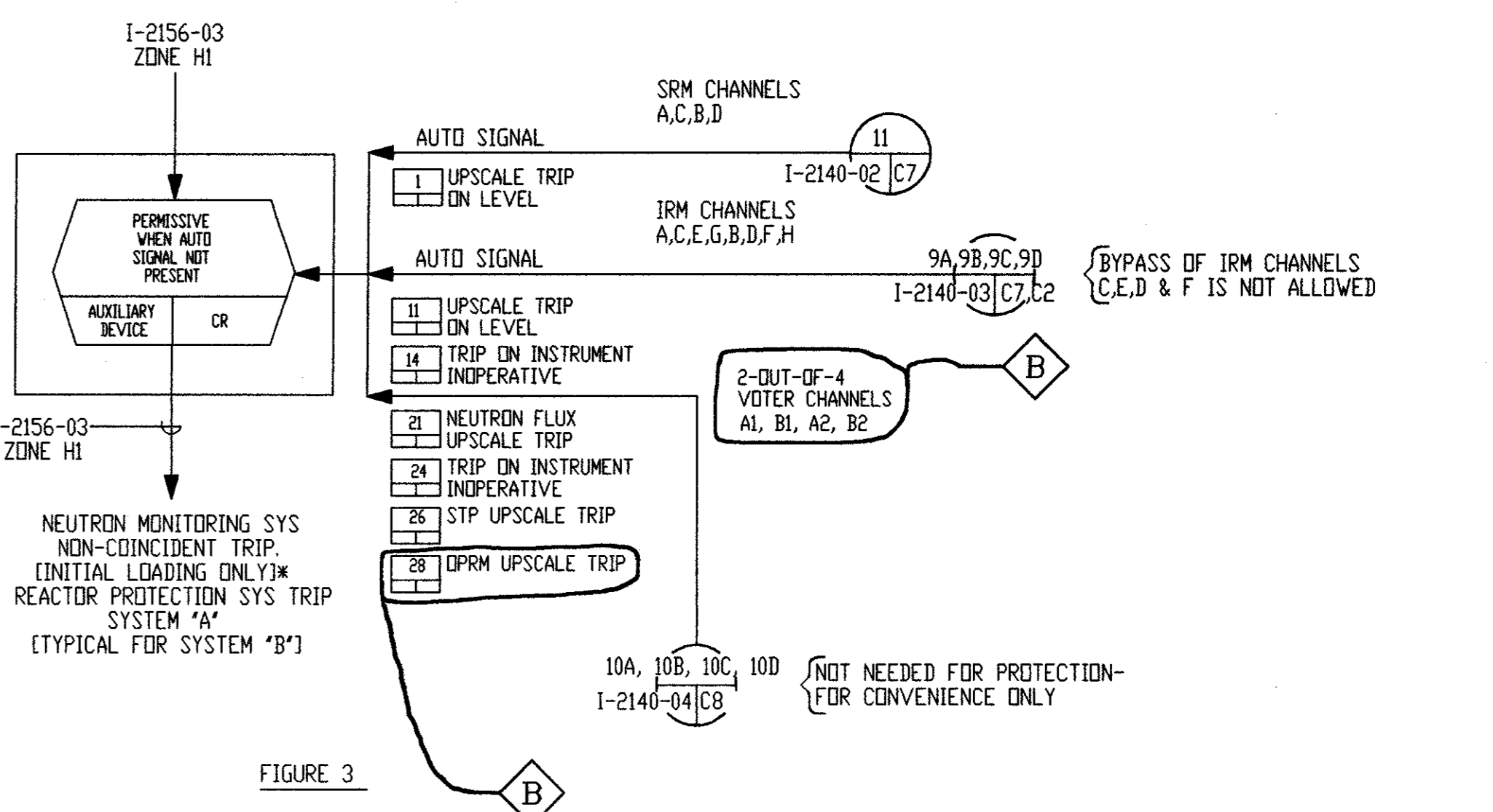
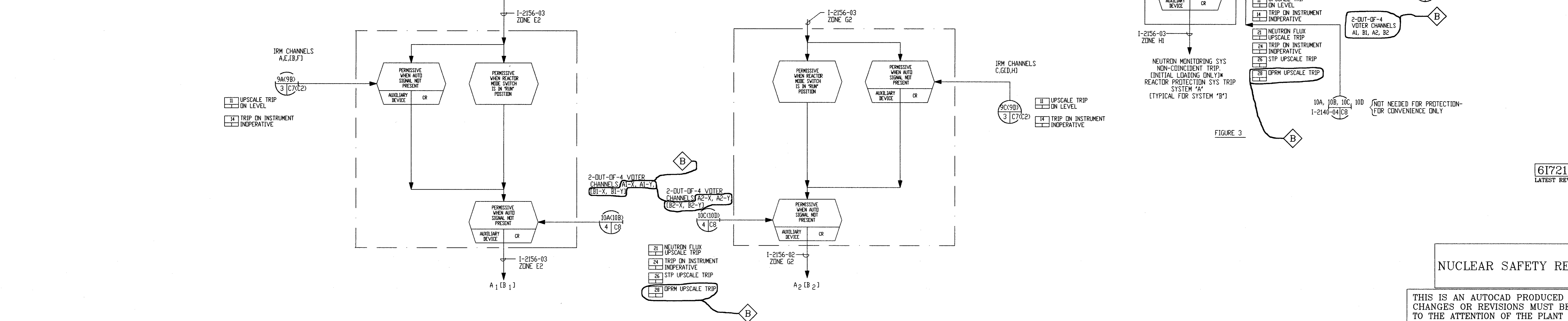
FIGURE 1
NEUTRON MONITORING SYSTEM
ROD WITHDRAWAL BLOCK
(PART OF ROD WITHDRAWAL SYSTEM
SHOWN ON REF. DWG. I-2110-SERIES)

- NOTES:
1. INPUTS TO COMPUTER ARE ISOLATED CLOSE TO ALARM CONTACTS.
 2. SEE I-2140-07.
 3. SEE I-2140-07.
 4. THE ENTIRE NEUTRON MONITORING SYSTEM IS A FULLY AUTOMATIC SYSTEM EXCEPT FOR MANUAL OPERATED SWITCHES.
 5. UNLESS OTHERWISE SHOWN ALL INSTRUMENT PIS NO.'S ARE PREFIXED C5100.
 6. CHANNELS A,C,E & G ARE FOR TRIP SYSTEM A. CHANNELS B,D,F & H ARE FOR TRIP SYSTEM B.
 7. FOR CONFIGURATION OF PANEL MOUNTED OPERATORS AND INDICATORS SEE DWG I-2290-02, PUR SPECIFICATION DATA SHEET SEC. 2.4.
- (NOTES CONTINUED ON I-2140-07)

- LEGEND:
- IRM - INTERMEDIATE RANGE MONITOR
 - RBM - ROD BLOCK MONITOR
 - APRM - AVERAGE POWER RANGE MONITOR
 - SRM - SOURCE RANGE MONITOR
 - LPRM - LOCAL POWER RANGE MONITOR
 - APRM-ODA - APRM OPERATOR DISPLAY ASSEMBLY
 - RBM-ODA - RBM OPERATOR DISPLAY ASSEMBLY
 - OPRM - OSCILLATION POWER RANGE MONITOR
 - STP - SIMULATED THERMAL POWER

- REFERENCE DOCUMENTS:
1. NEUTRON MONITORING SYSTEM IED ----- I-2146-01/02
 2. CONTROL ROD DRIVE HYD SYS LOGIC DIAGRAM ----- I-2110-01
 3. NUCLEAR REACTOR SYSTEM LOGIC DIAGRAM ----- I-2090-01
 4. REACTOR PROTECTION SYSTEM IED ----- I-2156-01,02,03,04
 5. PROCESS COMPUTER SYSTEM INPUT/OUTPUT REQUIREMENTS DESIGN SPEC. ----- 2246758 (RI-3892) 2246758AC (RI-3892)
 6. LOGIC SYMBOLS ----- 20944756 (RI-20)
 7. NEUTRON MONITORING SYSTEM ARRANGEMENT ----- 731E675 (RI-29)
 8. GENERAL REQUIREMENTS FOR INSTRUMENTATION AND ELECTRICAL EQUIPMENT ----- 21A1758 (RI-446) 21A1758B (RI-483)

FIGURE 2
NEUTRON MONITORING SYSTEM TRIP
REACTOR PROTECTION SYSTEM TRIP SYSTEM A
(TYPICAL FOR TRIP SYSTEM B)



NUCLEAR SAFETY RELATED

THIS IS AN AUTOCAD DRAWING. CHANGES OR REVISIONS MUST BE BROUGHT TO THE ATTENTION OF THE PLANT ENGINEERING DESIGN GROUP TO ENSURE THAT CONFIGURATION CONTROL IS MAINTAINED.

INC. CODE		Detroit Edison		Fermi 2	
U		TITLE			
LOGIC DIAGRAM					
NEUTRON MONITORING SYSTEM PART 1					
APPROVED BY					
DATE					
DRAWING NUMBER					
61721-2140-01					
LATEST REVISION					
B					

DCD'S INCORPORATED: EDP-28916 REV #		A PORTION OF THIS DRAWING IS AFFECTED BY THE FOLLOWING:		PREPARED BY		DATE	
OTHER REVISIONS: REVISED NOTE 5 AND CORRECTED REFERENCE DOCUMENTS TO AGREE WITH ARMS FORMAT. THESE CHANGES MEET THE EXEMPT CRITERIA OF ML507 4.1.7.3.b		TC		CHECKED BY		DATE	
PREPARED BY		DATE		APPROVED BY		DATE	
T. RIEFNER		7/21/00		DATE		DATE	
APPROVED BY		DATE		OTHER APPROVALS		DATE	
S. Collins		9-24-00		DATE		DATE	
RIP PORTING ENTRIES REQUIRE THE ADDITION OF THE ARM STATUS CODE EITHER 'ARC' OR 'ARF'		DATE		DATE		DATE	
DATE		DATE		DATE		DATE	
9-24-00		9-24-00		9-24-00		9-24-00	

61721-2140-01
LATEST REVISION
B