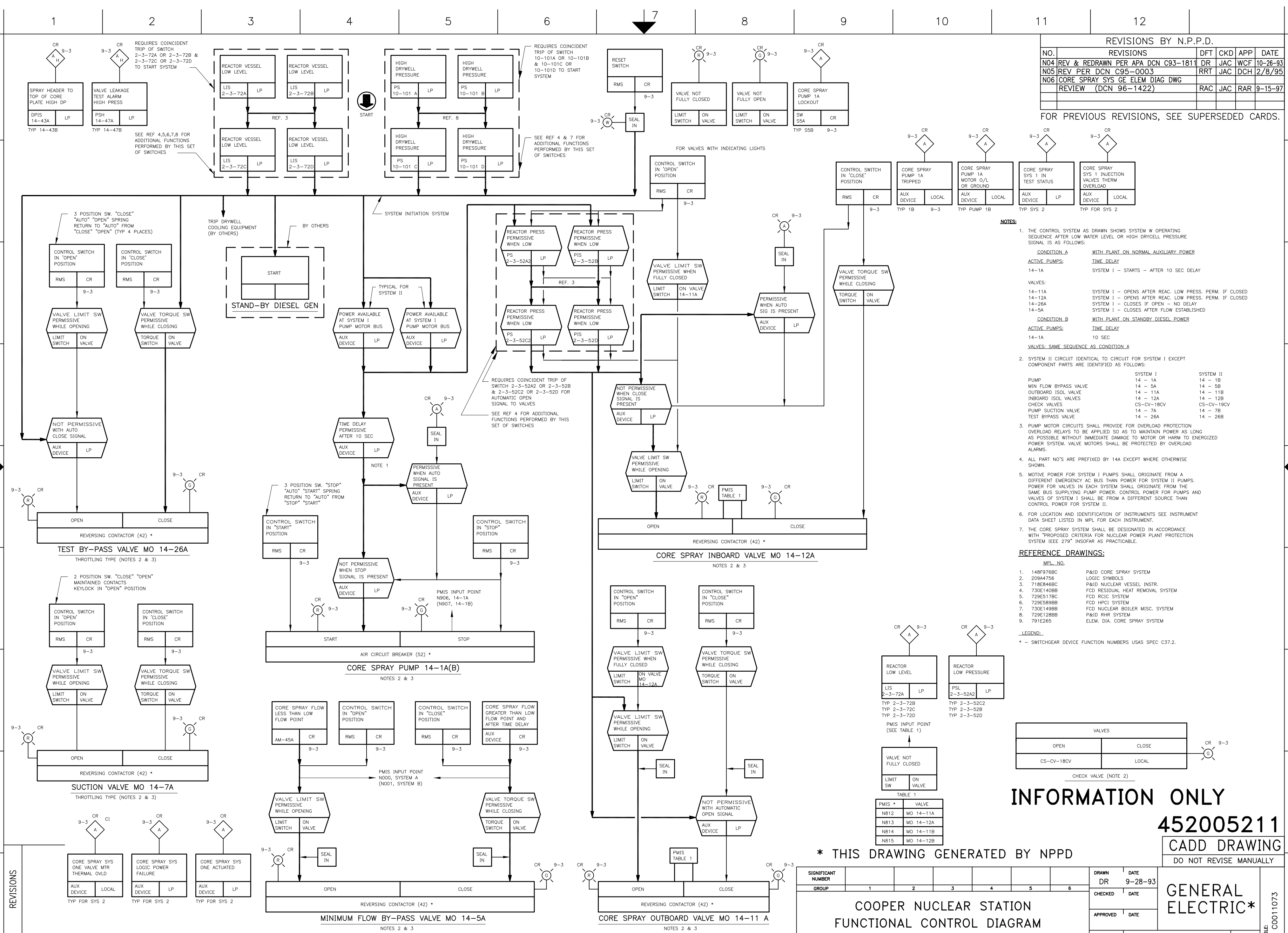


REVISIONS BY N.P.P.D.						
NO.	REVISIONS	DFT	CKD	APP	DATE	
N04	REV & REDRAWN PER APA DCN C93-1811	DR	JAC	WCF	10-26-83	
N05	REV PER DCN C95-0003	RRT	JAC	DCH	2/8/95	
N06	CORE SPRAY SYS GE ELEM DIAG DWG REVIEW (DCN 96-1422)	RAC	JAC	RAR	9-15-97	

FOR PREVIOUS REVISIONS, SEE SUPERSEDED CARDS.



- NOTES:**
- THE CONTROL SYSTEM AS DRAWN SHOWS SYSTEM I OPERATING SEQUENCE AFTER LOW WATER LEVEL OR HIGH DRYCELL PRESSURE SIGNAL IS AS FOLLOWS:
CONDITION A WITH PLANT ON NORMAL AUXILIARY POWER
ACTIVE PUMPS: TIME DELAY
 14-1A SYSTEM I - STARTS - AFTER 10 SEC DELAY
VALVES:
 14-11A SYSTEM I - OPENS AFTER REAC. LOW PRESS. PERM. IF CLOSED
 14-12A SYSTEM I - OPENS AFTER REAC. LOW PRESS. PERM. IF CLOSED
 14-26A SYSTEM I - CLOSING IF OPEN - NO DELAY
 14-5A SYSTEM I - CLOSING AFTER FLOW ESTABLISHED
CONDITION B WITH PLANT ON STANDBY DIESEL POWER
ACTIVE PUMPS: TIME DELAY
 14-1A 10 SEC
VALVES: SAME SEQUENCE AS CONDITION A
 - SYSTEM II CIRCUIT IDENTICAL TO CIRCUIT FOR SYSTEM I EXCEPT COMPONENT PARTS ARE IDENTIFIED AS FOLLOWS:

	SYSTEM I	SYSTEM II
PUMP	14 - 1A	14 - 1B
MIN FLOW BYPASS VALVE	14 - 5A	14 - 5B
OUTBOARD ISOL VALVE	14 - 11A	14 - 11B
INBOARD ISOL VALVES	14 - 12A	14 - 12B
CHECK VALVES	CS-CV-18CV	CS-CV-19CV
PUMP SUCTION VALVE	14 - 7A	14 - 7B
TEST BYPASS VALVE	14 - 26A	14 - 26B
 - PUMP MOTOR CIRCUITS SHALL PROVIDE FOR OVERLOAD PROTECTION OVERLOAD RELAYS TO BE APPLIED SO AS TO MAINTAIN POWER AS LONG AS POSSIBLE WITHOUT IMMEDIATE DAMAGE TO MOTOR OR HARM TO ENERGIZED POWER SYSTEM. VALVE MOTORS SHALL BE PROTECTED BY OVERLOAD ALARMS.
 - ALL PART NO'S ARE PREFIXED BY 14A EXCEPT WHERE OTHERWISE SHOWN.
 - MOTIVE POWER FOR SYSTEM I PUMPS SHALL ORIGINATE FROM A DIFFERENT EMERGENCY AC BUS THAN POWER FOR SYSTEM II PUMPS. POWER FOR VALVES IN EACH SYSTEM SHALL ORIGINATE FROM THE SAME BUS SUPPLYING PUMP POWER. CONTROL POWER FOR PUMPS AND VALVES OF SYSTEM I SHALL BE FROM A DIFFERENT SOURCE THAN CONTROL POWER FOR SYSTEM II.
 - FOR LOCATION AND IDENTIFICATION OF INSTRUMENTS SEE INSTRUMENT DATA SHEET LISTED IN MPL FOR EACH INSTRUMENT.
 - THE CORE SPRAY SYSTEM SHALL BE DESIGNATED IN ACCORDANCE WITH PROPOSED CRITERIA FOR NUCLEAR POWER PLANT PROTECTION SYSTEM IEEE 279* INSOFAR AS PRACTICABLE.

REFERENCE DRAWINGS:

- MPL NO.
- 148F976BC P&ID CORE SPRAY SYSTEM
 - 209A4756 P&ID LOGIC SYMBOLS
 - 718EB46BC P&ID NUCLEAR VESSEL INSTR.
 - 730E140BB FCD RESIDUAL HEAT REMOVAL SYSTEM
 - 729E517BC FCD RCIC SYSTEM
 - 729E589BB FCD HPCI SYSTEM
 - 730E149BB FCD NUCLEAR BOILER MISC. SYSTEM
 - 729E128BB P&ID RHR SYSTEM
 - 791E265 ELEM. DIA. CORE SPRAY SYSTEM

LEGEND:

* - SWITCHGEAR DEVICE FUNCTION NUMBERS USAS SPEC C37.2.

INFORMATION ONLY

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CADD DRAWING

DO NOT REVISE MANUALLY

* THIS DRAWING GENERATED BY NPPD

SIGNIFICANT NUMBER	GROUP						DRAWN	DATE	CHECKED	DATE	APPROVED	DATE	FILMED	REVISION	CADD FILE: CO011073
	1	2	3	4	5	6									
							DR	9-28-93							
COOPER NUCLEAR STATION FUNCTIONAL CONTROL DIAGRAM CORE SPRAY SYSTEM															
GENERAL ELECTRIC*															
729E402BB SH.1													N06		