

REF DESIG	DEVICE FUNCTION	SWITCH	INDICATOR LAMP	LOCATION	SM
B21-F02A	MAIN STEAM LINE (INBD)	S1A	X X	H12-P601-20C	12
B21-F02B	MAIN STEAM LINE (INBD)	S1B	X X	H12-P601-20C	12
B21-F02C	MAIN STEAM LINE (INBD)	S1C	X X	H12-P601-20C	12
B21-F02D	MAIN STEAM LINE (INBD)	S1D	X X	H12-P601-20C	12
B21-F02E	MAIN STEAM LINE (INBD)	S2A	X X	H12-P601-20C	13
B21-F02F	MAIN STEAM LINE (INBD)	S2B	X X	H12-P601-20C	13
B21-F02G	MAIN STEAM LINE (OUTBD)	S2C	X X	H12-P601-20C	13
B21-F02H	MAIN STEAM LINE (OUTBD)	S2D	X X	H12-P601-20C	13
B21-F02I	MAIN STEAM LINE (INBD)	S3A	X X	H12-P601-20C	12
B21-F02J	MAIN STEAM LINE (INBD)	S3B	X X	H12-P601-20C	12
B21-F02K	MAIN STEAM LINE (INBD)	S3C	X X	H12-P601-20C	12
B21-F02L	MAIN STEAM LINE (INBD)	S3D	X X	H12-P601-20C	12
B21-F02M	MAIN STEAM LINE (OUTBD)	S4A	X X	H12-P601-20C	12
B21-F02N	MAIN STEAM LINE (OUTBD)	S4B	X X	H12-P601-20C	12
B21-F02O	MAIN STEAM LINE (OUTBD)	S4C	X X	H12-P601-20C	13
B21-F02P	MAIN STEAM LINE (OUTBD)	S4D	X X	H12-P601-20C	13
B21-F01E	REACTOR WATER SAMPLE (INBD)	S5	X X	H12-P601-20C	14
B21-F01F	REACTOR WATER SAMPLE (OUTBD)	S6	X X	H12-P601-20C	14
B31-F019	REACTOR WATER SAMPLE (OUTBD)	S7	X X	H12-P601-20C	11
B31-F020	REACTOR WATER SAMPLE (OUTBD)	S8	X X	H12-P601-20C	11
E11-F009	RWR SUCTION COOLING ISOLATION (OUTBD)	S9	X X	H12-P601-21C	14
E11-F008	RWR SUCTION COOLING ISOLATION (OUTBD)	S10	X X	H12-P601-21C	14
E11-F023	RWR REACTOR HD STRAY (OUTBD)	S12	X X	H12-P601-18C	14
E11-F040	RWR DISCHARGE TO RADWASTE ISOL (INBD)	S14	X X	H12-P601-18C	14
E11-F049	RWR DISCH TO RADWASTE ISOLATION (OUTBD)	S15	X X	H12-P601-18C	14
G31-F001	REACTOR WATER CLEAN-UP (INBD)	S15	X X	H12-P601-01C	14
G31-F004	REACTOR WATER CLEAN-UP (OUTBD)	S16	X X	H12-P601-01C	14
H11-F010	ISOL VALVES (RESET) DIV 1	S22	X X	H12-P601-20C	11
H11-F011	ISOL VALVES (RESET) DIV 2	S23	X X	H12-P601-20C	11
E11-F015A	RWR REF. 14				
E11-F015B	RWR REF. 14				
E11-F022	RWR REACTOR HD STRAY ISOL (INBD)	S34	X X	H12-P601-18C	14
TIP CONT	TIP ISOLATION (INBD)			H12-P601-20H	11
E11-F079A	RWR SAMPLE LINE (INBD)	S20	X X	H12-P601-18C	15
E11-F079B	RWR SAMPLE LINE (OUTBD)	S17	X X	H12-P601-18C	15
E11-F079C	RWR SAMPLE LINE (INBD)	S21	X X	H12-P601-21C	15
E11-F080B	RWR SAMPLE LINE (OUTBD)	S18	X X	H12-P601-21C	15
R1A-F009	REACTOR WATER CLEAN-UP SYS	S24A,C		H12-P609	9
R1A-F010	ISOLATION LOGIC	S24B,C		H12-P611	9
R1A-F011	ISOLATION LOGIC	S24A,C		H12-P609	10
R1A-F012	ISOLATION LOGIC	S24B,C		H12-P611	10
R1A-F013	ISOLATION LOGIC	S24A,C		H12-P609	10
R1A-F014	ISOLATION LOGIC	S24B,C		H12-P611	10
R1A-F015	ISOL LOGIC TEST INDICATOR			H12-P609	9
R1A-F016	MAIN STEAM LINE (INBD)			H12-P622	12
R1A-F017	MAIN STEAM LINE (OUTBD)			H12-P623	13
R1A-F018	CONDENSER LOW VACUUM SWISS	S25A,C		H12-P609	7
R1A-F019	CONDENSER LOW VACUUM SWISS	S25B,D		H12-P611	8
R21-F023A	LEVEL/PRESS REC	S25A		H12-P601-18B	16
R21-F023B	LEVEL/PRESS REC	S25B		H12-P601-21B	16
R21-F024	REACTOR WATER SAMPLE	S36A,C		H12-P609	10
R21-F025	REACTOR WATER SAMPLE	S36B,D		H12-P611	10
R21-F026	INBOARD ISOLATION VALVE IN TEST	S27A		H12-P601-20C	3
R21-F027	OUTBOARD ISOLATION VALVE IN TEST	S27B		H12-P601-20C	3
R21-F028	MANUAL ISOLATION	S28A		H12-P601-07D	7
R21-F029	MANUAL ISOLATION	S28B		H12-P601-07D	7
R21-F030	MANUAL ISOLATION	S28C		H12-P601-07D	7
R21-F031	MANUAL ISOLATION	S28D		H12-P601-07D	8

REV	DATE	BY	CHK	DESCRIPTION
1	7/1/83	Y		INCRP FOR E-5013
2				Bechtel Change to Supplier Documents

**REFERENCE DOCUMENTS:**

MI-112-877 FF134-760 EX H12-K60 POWER & UTILITY DIMP PNL.

MI-112-877 FF134-760 EX H12-K60 POWER & UTILITY DIMP PNL.

**LEGEND:**

- MATCH NUMBER
- ZONE
- MATCH LINE SHEET NUMBER
- ⊥ INDICATES GROUND
- ⊥ INDICATES SIGNAL COMMON ISOLATED BUS
- LOCATION USED ONLY WHEN NECESSARY FOR CLARITY
- PANEL NUMBER OR TERMINAL NUMBER
- INDICATES PCC LINE CODE WHEN REQUIRED
- ⊕ RMS COMPUTER INPUT
- ⊕ CCS COMPUTER INPUT

GENERAL ELECTRIC 791E401WJ  
 THE ELEMENTS OF THE NUCLEAR STEAM SUPPLY SHUTOFF SYSTEM

- NOTES, REFERENCE DRAWING, PUMP & VALVE TABULATIONS.
- RELAY TABULATIONS.
- SWITCH DEVELOPMENTS.
- VALVE TYPICAL.
- COMPUTER INPUTS ANNUUM ATOMS.
- FLOW DIAGRAM.
- POWER DISTRIBUTION.
- RELAY LOGIC & G.C.
- RELAY LOGIC & G.C.
- VALVE LOGIC.
- VALVE LOGIC.
- MAIN STEAM LINE VALVES (INBOARD).
- MAIN STEAM LINE VALVES (OUTBOARD).
- VALVES.
- RWR SAMPLE LINE VALVES.
- POST ACCIDENT MONITOR.

- UNLESS OTHERWISE INDICATED, THE FOLLOWING REFERENCE DESIGNATIONS SHOWN ON THIS DIAGRAM ARE PREFIXED WITH B21M.
- REFERENCE DESIGNATIONS
- ALL INTERCONNECTING CABLES (RMS & INBOARD) BETWEEN PANELS TERMINAL BOARD ALL RPL, CCG, 100 & 6E MUST BE RUN IN SEPARATE CONDUITS.
- REMOVED
- UNLESS OTHERWISE INDICATED, THE FOLLOWING REFERENCE DESIGNATIONS SHOWN ON THIS DIAGRAM ARE PREFIXED WITH B21M.
- ALL I/O LAMPS & HOLDERS ARE ELEMEN TYPE 2180DMP-655
- CONTROL AND INDICATION DEVICES TO BE ENCLOSED WITH A METAL BARRIER IF REQUIRED FOR SEPARATION.
- SHIELDED TWISTED PAIR CABLEING IS SUPPLIED AS PART OF PCCC AT THE ANNUNCIATOR.
- 95 RELAYS LOCATED IN OTHER MCC'S CONTAINING MOV STARTERS FOR VALVES IN THIS SYSTEM AND DIVISION, IF REQUIRED.
- ONE KEYLOCK TEST SWITCH REQUIRED PER SYSTEM. THE NUMBER OF 95 RELAYS IS BASED ON THE NUMBER OF MCC UNITS PER CABINET AND THE NUMBER OF SYSTEMS PER CABINET. ONE OR MORE RELAYS PER SYSTEM WITH CONTACT UTILIZATION AS FOLLOWS:
  - ONE CONTACT PER MCC VALVE UNIT FOR OFF/ON PROTECTION (ENAL)
  - ONE CONTACT PER 95 RELAY FOR ALLOW LIGHT
  - ONE CONTACT USED TO INTERLOCK OTHER 95 RELAY SEE INDIVIDUAL VALVE CIRCUITS FOR APPLICATION (REF. 18)
- ALL PCCC SUPPLIED CABLES ARE N55-A UNLESS OTHERWISE SPECIFIED.
- ALL N55-A CABLES TO BE ROUTED IN CONDUIT EXCEPT SHOWN FOR REF ONLY.
- 125V DC POWER SUPPLY ALSO FEEDS PANEL 100E

**APED DRAWING REVIEW COMMENTS AS CHECKED BELOW**

NO COMMENTS	<input type="checkbox"/>
COMMENTS AS INDICATED FOR APD'S IN FORMATION AND USE ONLY NO REPLY REQUIRED	<input type="checkbox"/>
COMMENTS AS INDICATED WHEN DIRECTLY AFFECTING BECHTEL RESPONSIBILITY REPLY REQUIRED IF NOT INCORPORATED BY APD	<input type="checkbox"/>

DATE: 7/1/83  
 REVIEWED BY: [Signature]  
 BECHTEL SAN FRANCISCO 8836

UNCONTROLLED DOCUMENT FOR REFERENCE ONLY

FF 114510 8836-MI-821-131(1)-89

DESIGN	CHG BY	CHK BY	DATE	DESCRIPTION
FF 114510	NU2738	NU2738	7/1/83	FOR SUPPLIER DOCUMENTS

PRC APERTURE CARD

24X

Docket # 58-387  
 Control # 8804050245-132  
 Date 3-29-83  
 of Document  
 REGULATORY DOCKET FILE