

Question 1. Review the drawings for all systems serving safety-related functions at the schematic level to determine whether or not upon the reset of an ESF actuation signal, all associated safety-related equipment remains in its emergency mode.

Answer This review has been completed and the result is documented in our response to Question 3.

Question 2. Verify the actual installed instrumentation and controls at the facility are consistent with the schematics reviewed in Item 1 above by conducting a test to demonstrate that all equipment remains in its emergency mode upon removal of the actuating signal and/or manual resetting of the various isolating or actuation signals. Provide a schedule for the performance of the testing in your response to this Bulletin.

Answer As is documented in our response to Item 2.1.4 of NUREG-0578 "Containment Isoation", Reference (a), changes were made to preclude automatic loss of containment isolation as a result of resetting containment isolation signals, whether manual reset or removal of the actuating signal. this change was verified by test during the last refueling outage (March 1980), therefore no additional tests will be scheduled on containment isolation.

Due to the complexity of testing the two remaining systems at power, the Safety Injection Actuation System and the Containment Spray System, the tests will be accomplished during the next extended unscheduled cold shutdown or during the next refueling outage, now scheduled for June 1981.

Question 3. If any safety-related equipment does not remain in its emergency mode upon reset of an ESF signal at your facility, describe proposed system modification, design change, or other corrective action planned to resolve the problem.

Answer Table 1 documents the results of our review per question 1. The containment isolation system is not listed in Table 1 due to the fact that all review and testing was done during the March 1980 refueling outage and that no modifications need be done.

A design change is being prepared to modify safety-related equipment that presently does not remain in its emergency mode, upon reset of an ESF signal at Maine Yankee; with the exception of some equipment for which we will provide further details and justification not later than August 1, 1980. The projected schedule for completion if the design change will be during the June 1981 refueling outage.

TABLE 1

Component Description	System Service	Safety Actuation Signal	Reference to Control Circuitry 11550-	Return to Normal After Reset
P-14A, B, S	High Pressure Safety Injection Pump	SIAS Starts	ESK-5AN, 5AW	Yes
HCV-204T (HSI-M-51)	Charging Pump Suction From RWST	SIAS Opens	ESK-7K, 7M 1.29-104B	Yes
HCV-204U (HSI-M-50)	Charging Pump Suction From RWST	SIAS Opens	ESK-7J, 7M 1.29-104B	Yes
LCV-204V (CH-M-1)	Volume Control Tank to Charging PPS	SIAS Closes	ESK-7L 1.29-105B	No
LCV-204S (CH-M-87)	Volume Control Tank to Charging PPS	SIAS Closes	ESK-7L 1.29-105B	No
HCV-301 (HSI-M-41)	Charging Pump Outlet to Auxiliary High Pressure Header	SIAS Opens	ESK-7M, 7J 1.29-60D	No
HCV-302 (HSI-M-42)	Charging Pump Outlet to High Pressure Header	SIAS Opens	ESK-7K, 7M 1.29-60D	No
HCV-313 (HSI-M-12)	Safety Injection System High Pressure Auxiliary Header to Loop 1	SIAS Opens	ESK-7J, 7M 1.29-64D	No
HCV-323 (HSI-M-22)	Safety Injection System High Pressure Auxiliary Header to Loop 2	SIAS Opens	ESK-7M, 7J 1.29-64D	No
HCV-333 (HSI-M-32)	Safety Injection System High Pressure Auxiliary Header to Loop 3	SIAS Opens	ESK-7M, 7J 1.29-64D	No

TABLE 1
(continued)

Component Description	System Service	Safety Actuation Signal	Reference to Control Circuitry 11550-	Return to Normal After Reset
HCV-311 (HSI-M-11)	Safety Injection System High Pressure Header to Loop 1	SIAS Opens	ESK-7K, 7M 1.29-64D	No
HCV-321 (HSI-M-21)	Safety Injection System High Pressure Header to Loop 2	SIAS Opens	ESK-7K, 7M 1.29-64D	No
HCV-331 (HSI-M-31)	Safety Injection System High Pressure Header to Loop 3	SIAS Opens	ESK-7K, 7M 1.29-64D	No
HCV-254 (CH-A-33)	Charging Line Stop Valve	SIAS Closes	ESK-7M, 7K 1.29-35C	Yes
HCV-255 (CH-A-32)	Charging Line Stop Valve	SIAS Closes	ESK-7M, 7K 1.29-35C	Yes
HCV-314 (SIA-A-12)	Safety Injection Tank Fill Valves	SIAS Closes	ESK-7J, 7M 1.29-28C	Yes
HCV-324 (SIA-A-22)	Safety Injection Tank Fill Valves	SIAS Closes	ESK-7J, 7M 1.29-28C	Yes
HCV-334 (SIA-A-32)	Safety Injection Tank Fill Valves	SIAS Closes	ESK-7J, 7M 1.29-28C	Yes
P-12A, B	Low Pressure Safety Injection Pumps	SIAS Starts RAS STOPS	ESK-5AP, 7M	No

TABLE 1
(continued)

Component Description	System Service	Safety Actuation Signal	Reference to Control Circuitry 11550-	Return to Normal After Reset
HCV-312 (LSI-M-11)	Safety Injection System Low Pressure Header to Loop 1	SIAS Opens	ESK-7J, 7M 1.29-106A	No
HCV-322 (LSI-M-21)	Safety Injection System Low Pressure Header to Loop 2	SIAS Opens	ESK-7J, 7M 1.29-106A	No
HCV-332 (LSI-M-31)	Safety Injection System Low Pressure Header to Loop 3	SIAS Opens	ESK-7J, 7M 1.29-106A	No
FCV-212 (CH-F-38)	Charging Flow Control Valve	SIAS Closes	ESK-7K, 7M	Yes
LCV-210Z (BA-A-32)	Boric Acid Tank to Chemical Tank	SIAS Closes	ESK-7K, 7M 1.29-34C	Yes
TCV-201K (LD-T-5)	Ht Ex E-67 Letdown Temperature Control Valve	SIAS Closes	ESK-7J, 7M 1.29-103H	Yes
SOV-4008A (CH-S-119)	Charging Pump Primary System Isolation	SIAS Closes	ESK-7J, 7M	Yes
SOV-4009A (CH-S-121)	Charging Pump Primary System Isolation	SIAS Closes	ESK-7J, 7M	Yes
SOV-4008B (CH-S-120)	Charging Pump Primary System Isolation	SIAS Closes	ESK-7J, 7M	Yes

TABLE 1
(continued)

Component Description	System Service	Safety Actuation Signal	Reference to Control Circuitry 11550-	Return to Normal After Reset
SOV-4009B (CH-S-122)	Charging Pump Primary System Isolation	SIAS Closes	ESK-7K, 7M	Yes
PCV-211 (SL-P-3)	Seal Water Pressure Containment for RCP	SIAS Closes	ESK-7K, 7M 1.29-29C	Yes
HCV-242 (LD-M-2)	Letdown Isolation Valve to Regen HX E-67	SIAS Closes	ESK-7K, 7M 1.29-61C	No
FCV-216 (CH-F-70)	Charging PPS to Loop Fill Hdr. Isolation Valve	SIAS Closes	ESK-7L 1.29-66D	Yes
P-61A, B, S	Containment Spray Pumps	SIAS Starts	ESK-5AU, 5AK, 7M	No
MOV-3211 (CS-M-1)	"A" Train Inlet Header Stop to Spray Ring	CSAS Opens	ESK-7B, 6BN	No
MOV-3212 (CS-M-2)	"B" Train Inlet Header Stop to Spray Ring	CSAS Opens	ESK-7B, 6BN	No
MOV-3213 (CS-M-66)	Spray Chemical Line to Refueling Water Storage Tank	CSAS Opens	ESK-7B, 6BR	No
MOV-3214 (CS-M-71)	Spray Chemical Line to Refueling Water Storage Tank	CSAS Opens	ESK-7B, 6BR	No
TV-3412 (PCC-A-238)	Reactor Containment Recirculation Coolers Outlet Header Isolation	CSAS Closes	ESK-7B	No

TABLE 1
(continued)

Component Description	System Service	Safety Actuation Signal	Reference to Control Circuitry 11550-	Return to Normal After Reset
TCV-1720 (SCC-T-227)	Hydrogen Coolers Outlet Temperature Control	CSAS Closes	ESK-7B	Yes
TCV-1721 (SCC-T-257)	Turbine Oil Coolers Outlet Temperature Control	CSAS Closes	ESK-7B	Yes
TCV-1722 (SCC-T-315)	Electro Hydraulic Oil Coolers Temperature Control	CSAS Closes	ESK-7B	Yes
FN-44A, B	Spray Pump Room Exhaust Fan	SIAS Starts	ESK-6CK, 7L	Yes
MOV-1701 (SCC-M-165)	Residual Heat Exchange Outlet	RAS Opens	ESK-7F, 6BK	No
MOV-3202 (S1A-A-53)	LPSI PP Return to Refuel TK Safeguard Recirc. Stop to RWST	RAS Closes	ESK 7E, 6BQ	No
MOV-3204 (S1A-A-54)	LPSI PP Return to Refuel TK Safeguard Recirc. Stop to RWST	RAS Closes	ESK 7F, 6BQ	No
MOV-3205 (LS1-M-41)	Refuel Water Tank Outlet to Safeguard Pumps	RAS Closes	ESK 7E, 6BP	No
MOV-3206 (LS1-M-)	Refuel Water Tank Outlet to Safeguard Pumps	RAS Closes	ESK 7F, 6BP	No
MOV-3207 (CS-M-91)	Containment Sump	RAS Opens	ESK 7E, 6BP	No

TABLE 1
(continued)

Component Description	System Service	Safety Actuation Signal	Reference to Control Circuitry 11550-	Return to Normal After Reset
MOV-3208 (CS-M-91)	Containment Sump	RAS Opens	ESK 7F, 6BP	No
MOV-3209 (HS1-M-54)	RES Heat Exchanger to Charging Pumps	RAS Opens	ESK 7E, 6BN	No
MOV-3210 (HS1-M-55)	RES Heat Exchanger to Charging Pumps	RAS Opens	ESK 7F, 6BN	No
MOV-3401 (PCC-M-43)	Residual Heat Exchanger	RAS Opens	ESK 7E, 6BK	No
MOV-3402 (PCC-M-90)	Primary Component Coolant Water Inlet to Aux Bldg.	RAS Closes	ESK 7E, 6BL	No
MOV-3403 (PCC-M-150)	Primary Component Coolant Water to RC Heat Exchangers	RAS Closes	ESK 7E, 6BL	No
SOV-3217A	Air Control to FCV-3217A FCV-3217A - Vent HDR to Containment	RAS Opens	7E	Yes
SOV-3217B	Air Control to FCV-3217B FCV-3217B - Vent HDR to Containment	RAS Opens	7F	Yes
HCV-204T, U	HPSI Suction	RAS Closes	7F, 7E 1.29-104B	Yes