TABLE 4.3-2

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTAION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
1. SAFETY INJECTION (SIAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Containment Pressure - High	S	R	Q	1, 2, 3
c. Pressurizer Pressure - Low	S	R	Q	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(2) (3) (6)	1, 2, 3
2. CONTAINMENT SPRAY (CSAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Containment Pressure -- High - High	S	R	Q	1, 2, 3
c. Automatic Actuation Logic	N.A.	N.A.	M(1) (2) (3)	1, 2, 3
3. CONTAINMENT ISOLATION (CIAS)				
a. Manual CIAS (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Containment Pressure - High	S	R	Q	1, 2, 3
c. Pressurizer Pressure - Low	S	R	Q	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(1) (2) (3)	1, 2, 3
4. MAIN STEAM LINE ISOLATION				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3
b. Steam Generator Pressure - Low	S	R	Q	1, 2, 3
c. Containment Pressure - High	S	R	Q	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(1) (2) (3)	1, 2, 3

REPLACE WITH INSERT "B"

REPLACE WITH INSERT "A"

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
5. SAFETY INJECTION SYSTEM RECIRCULATION (RAS)				
a. Manual RAS (Trip Buttons)	N.A.	N.A.	R	1, 2, 3, 4
b. Refueling Water Storage Pool - Low	S	R	Q	1, 2, 3, 4
c. Automatic Actuation Logic	N.A.	N.A.	M(1) (2) (3)	1, 2, 3, 4
6. LOSS OF POWER (LOV)				
a. 4.16 kV Emergency Bus Undervoltage (Loss of Voltage)	N.A.	R	D(4)	1, 2, 3
b. 480 V Emergency Bus Undervoltage (Loss of Voltage)	N.A.	R	D(4)	1, 2, 3
c. 4.16 kV Emergency Bus Undervoltage (Degraded Voltage)	N.A.	R	D(4)	1, 2, 3

REPLACE WITH INSERT "A"

TABLE 4.3.-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
7. EMERGENCY FEEDWATER (EFAS)				
a. Manual (Trip Buttons)	N.A.	N.A.	R	1, 2, 3
b. SG Level (1/2)-Low and ΔP (1/2) - High	S	R	Q	1, 2, 3
c. SG Level (1/2) - Low and No Pressure - Low Trip (1/2)	S	R	Q	1, 2, 3
d. Automatic Actuation Logic	N.A.	N.A.	M(1) (2) (3)	1, 2, 3
e. Control Valve Logic (Wide Range SG Level - Low)	S	R	SA(5)	1, 2, 3

REPLACE WITH INSERT "A"

TABLE NOTATION

(1) Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.

(2) Testing of Automatic Actuation Logic shall include energization/deenergization of each initiation relay and verification of the OPERABILITY of each initiation relay.

(3) A subgroup relay test shall be performed which shall include the energization/deenergization of each subgroup relay and verification of the OPERABILITY of each subgroup relay. Relays K109, K114, K202, K301, K305, K308 and K313 are exempt from testing during power operation but shall be tested at least once per 18 months and during each COLD SHUTDOWN condition unless tested within the previous 62 days.

(4) Using installed test switches.

(5) To be performed during each COLD SHUTDOWN if not performed in the previous 6 months.

(6) Each train shall be tested, with the exemption of relays, K110, K410 and K412, at least every 62 days on a STAGGERED TEST BASIS. Relays K110, K410 and K412 shall be tested at least every 62 days but will be exempt from the STAGGERED TEST BASIS.

Insert "A"

Automatic Actuation Logic (except subgroup relays)	N.A.	N.A.	Q(2)	1, 2, 3
Actuation Subgroup Relays	N.A.	N.A.	M(1) (3)	1, 2, 3

Insert "B"

Automatic Actuation Logic (except subgroup relays)	N.A.	N.A.	Q(2)	1, 2, 3
Actuation Subgroup Relays	N.A.	N.A.	M(3) (6)	1, 2, 3