REVISED 1/11/90

INSTRUMENTATION

3/4.3.2 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.2 The Engineered Safety Features Actuation System (ESFAS) instrumentation channels and bypasses shown in Table 3.3-3 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3-4 and with RESPONSE TIMES as shown in Table 3.3-5.

APPLICABILITY: As shown in Table 3.3-3.

ACTION:

- a. With an ESFAS instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3-4, declare the channel inoperable and apply the applicable ACTION requirement of Table 3.3-3 until the channel is restored to OPERABLE status with the trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With an ESFAS instrumentation channel inoperable, take the ACTION shown in Table 3.3-3.

SURVEILLANCE SEQUIREMENTS

4.3.2.1 Each ESFAS instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST operations for the MODES and at the frequencies shown in Table 4.3-2.

4.3.2.2 The logic for the bypasses shall be demonstrated OPERABLE during the at power CHANNEL FUNCTIONAL TEST of channels affected by bypass operation. The total bypass function shall be demonstrated OPERABLE at least once per 18 months during CHANNEL CALIBRATION testing of each channel affected by bypass operation.

4.3.2.3 The ENGINEERED SAFETY FEATURES RESPONSE TIME of each ESFAS function shall be demonstrated to be within the limit at least once per 18 months.* Each test shall include at least one channel per function such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ESFAS function as snown in the "Total No. of Channels" Column of Table 3.3-3.

9001290106 900119 PDR ADOCK 05000529 PDC PDC

*Deferred until cycle 3 refueling outage.

TABLE 3.3-3

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

ESF	A SYSTEM FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
1.	SAFETY INJECTION (SIAS)					
	A. Sensor/Trip Units					
	1. Containment Pressure - High	4	2	3	1, 2, 3, 4	13*, 14*
	2. Pressurizer Pressure - Low	4	2	3	1, 2, 3(a), 4(a)	13*, 14*
	B. ESFA System Logic					
	1. Matrix Logic	6	1	3	1, 2, 3, 4	17
	2. Initiation Logic	4(c)	2(d)		1, 2, 3, 4	12
	3. Manual SIAS (Trip Buttons)	4(c)	2(d)	4	1, 2, 3, 4	12
	C. Automatic Actuation Logic	2	1	2	1, 2, 3, 4	16
п.	CONTAINMENT ISOLATION (CIAS)					
	A. Sensor/Trip Units					
	1. Containment Pressure - High	4	2	3	1, 2, 3	13*, 14*,
	2. Pressurizer Pressure - Low	4	2	3	1, 2, 3(a)	13*, 14*
	B. ESFA System Logic					
	1. Matrix Logic	6	1	3	1, 2, 3	17
	2. Initiation Logic	4(c)	2(d)	4	1, 2, 3, 4	12

PALO VERDE - UNIT 2

3/4 3-18