



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated November 28, 1990, as supplemented on December 4, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-63 is hereby amended to read as follows:

9012140119 901207
PDR ADOCK 05000220
P PDC



27

7

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 119, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



for Edward G. Greenman, Acting Assistant Director
for Region I Reactors
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 7, 1990



27

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A as follows:

Remove Pages

191
192
193
196a
197
198
199
200
204
205
207
208
210
211
212a
213
215
224
225a
226
227
231
232a

Insert Pages

191
192
193
196a
197
198
199
200
204
205
207
208
210
211
212a
213
215
224
225a
226
227
231
232a



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Table 3.6.2a

INSTRUMENTATION THAT INITIATES SCRAM

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (o)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(1) Manual Scram	2	1			x	x	x
(2) High Reactor Pressure	2	2	≤ 1080 psig		x	x	x
(3) High Drywell Pressure	2	2	≤ 3.5 psig		x	(a)	(a)
(4) Low Reactor Water Level	2	2	≥ 53 inches (Indicator Scale)		x	x	x
(5) High Water Level Scram Discharge Volume	2	2	≤ 45 gal.		(b)	x	x



Handwritten marks and characters in the top right corner, including what appears to be the number '34' and some illegible symbols.

Table 3.6.2a (cont'd)

INSTRUMENTATION THAT INITIATES SCRAM

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (o)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(6) Main-Steam-Line Isolation Valve Position	2	4(h)	≤ 10 percent valve closure from full open		(c)	(c)	x
(7) High Radiation Main-Steam-Line	2	2	≤ 5 times normal background at rated power ⁽ⁿ⁾		x	x	x
(8) Shutdown Position of Reactor Mode Switch	2	1	--		(k)	x	x
(9) Neutron Flux (a) IRM (i)	2	3(d)	≤ 96 percent of full scale		(g)	(g)	(g)

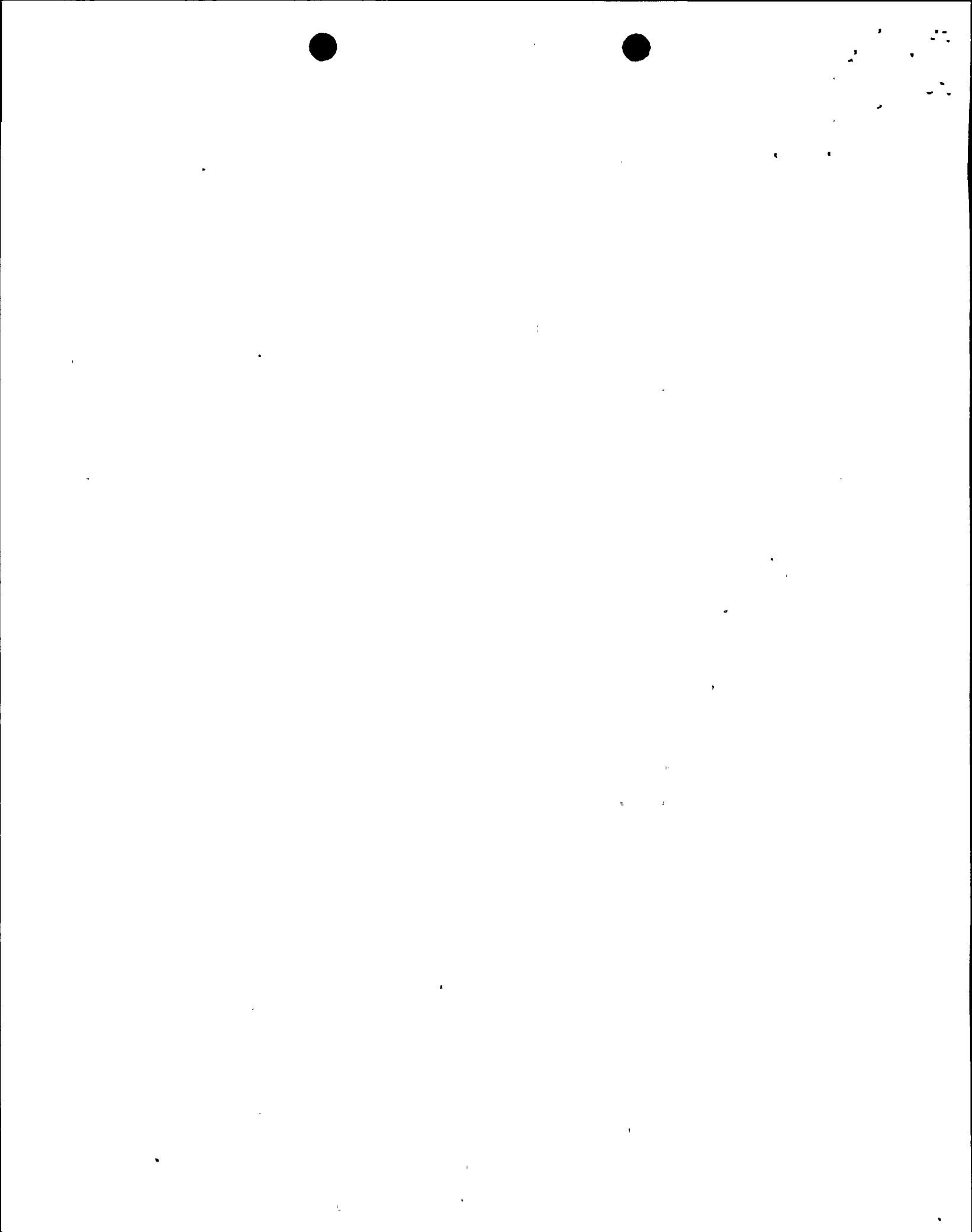


Table 3.6.2a (cont'd)

INSTRUMENTATION THAT INITIATES SCRAM

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (o)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				Shutdown	Refuel	Startup	Run
(ii) Inoperative	2	3(d)	--		x	x	
(b) APRM							
(i) Upscale	2	3(e)	Figure 2.1.1		x	x	x
(ii) Inoperative	2	3(e)	--		x	x	x
(iii) Downscale	2	3(e)	≥ 5 percent of full scale		(g)	(g)	(g)
(10) Turbine Stop Valve Closure	2	4	≤ 10% valve closure				(i)
(11) Generator Load Rejection	2	2	(j)				(i)



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

NOTES FOR TABLES 3.6.2a and 4.6.2a (cont)

- (n) Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20% rated power, the normal full-power radiation background level and associated trip and alarm setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip and alarm setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip and alarm setpoints shall be reset within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection or within 12 hours of establishing reactor power levels below 20% rated power, while these functions are required to be operable. At reactor power levels below 20% rated power, hydrogen injection shall be terminated and the injection system secured.
- (o) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same trip system is monitoring that parameter. This time interval is extended up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance.



11
12
13

14
15

16

17
18

19

20

21

22

23

24

25

26

27

Table 3.6.2b

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (f)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
<u>PRIMARY COOLANT ISOLATION</u>							
(Main Steam, Cleanup, and Shutdown)							
(1) Low-Low Reactor Water Level	2	2	≥ 5 inches (Indicator Scale)			x	x
(2) Manual	2	1	- -	x	x	x	x
<u>MAIN-STEAM-LINE ISOLATION</u>							
(3) High Steam Flow Main-Steam Line	2	2	≤ 105 psid			x	x



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Table 3.6.2b (cont'd)

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (f)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(4) High Radiation Main Steam Line	2	2	≤ 5 times normal background at rated power ^(*)			x	x
(5) Low Reactor Pressure	2	2	≥ 850 psig				x
(6) Low-Low-Low Condenser Vacuum	2	2	≥ 7 in. mercury vacuum			(a)	x
(7) High Temperature Main Steam Line Tunnel	2	2	≤ 200 F			x	x



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Table 3.6.2b (cont'd)

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (f)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
<u>CLEANUP SYSTEM ISOLATION</u>							
(8) High Area Temperature	1	2	≤ 190	x	x	x	x
<u>SHUTDOWN COOLING SYSTEM ISOLATION</u>							
(9) High Area Temperature	1	1	≤ 170	x	x	x	x
<u>CONTAINMENT ISOLATION</u>							
(10) Low-Low Reactor Water	2	2	≥ 5 inches (Indicator Scale)	(c)		x	x



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Table 3.6.2b (cont'd)

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (f)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(11) High Drywell Pressure	2	2	≤ 3.5 psig	(c)		(b)	(b)
(12) Manual	2	1	--	x	x	x	x



11
12
13
14
15

NOTES FOR TABLES 3.6.2b and 4.6.2b

- (a) May be bypassed in the refuel and startup positions of the reactor mode switch when reactor pressure is less than 600 psi.
- (b) May be bypassed when necessary for containment inerting.
- (c) May be bypassed in the shutdown mode whenever the reactor coolant system temperature is less than 215°F.
- (d) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2b, the primary sensor will be calibrated and tested once per operating cycle.
- (e) Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20% rated power, the normal full-power radiation background level and associated trip and alarm setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip and alarm setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip and alarm setpoints shall be reset within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection or within 12 hours of establishing reactor power levels below 20% rated power, while these functions are required to be operable. At reactor power levels below 20% rated power hydrogen injection shall be terminated and the injection system secured.
- (f) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter. This time interval is extended up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration Surveillance.



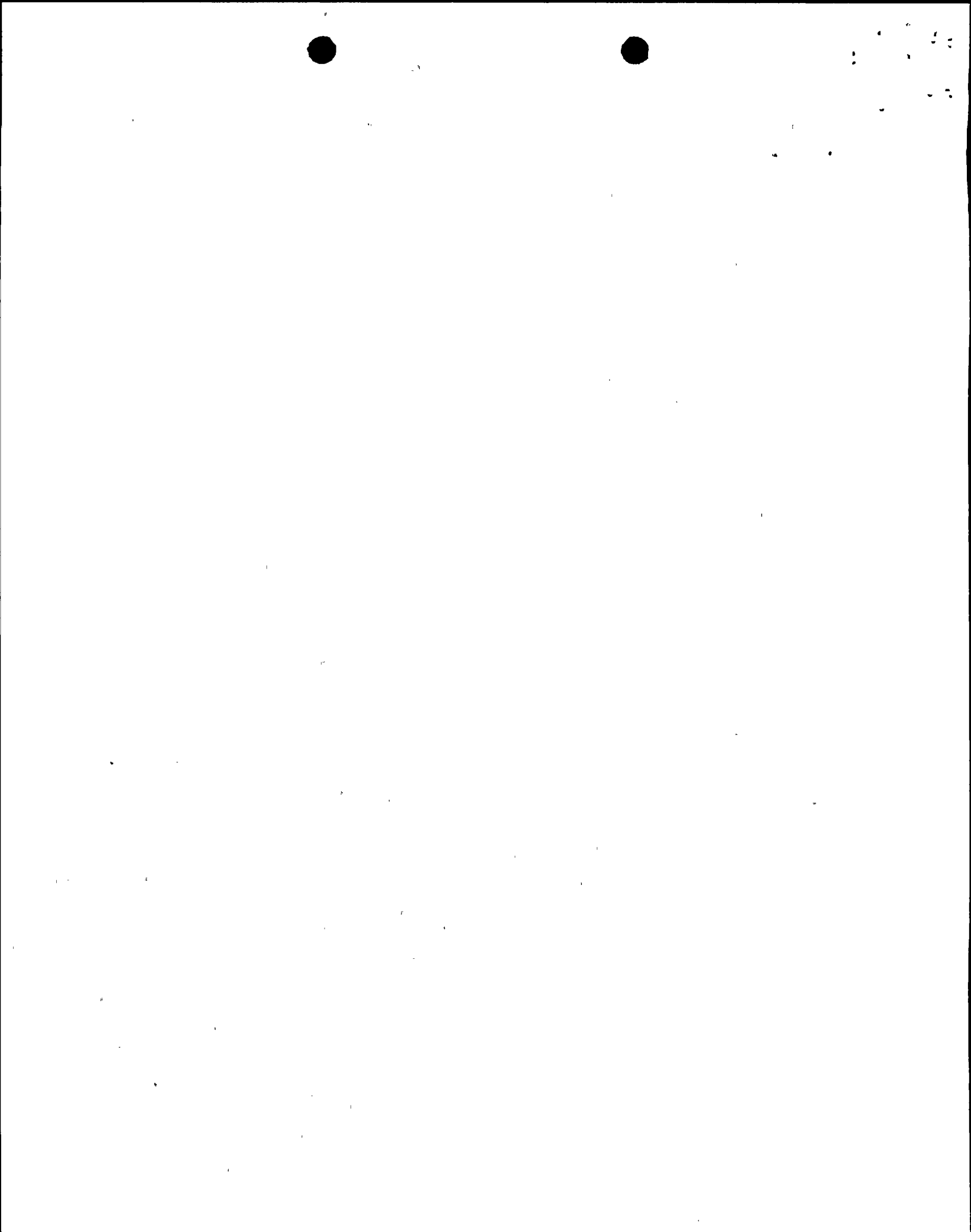
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Table 3.6.2c

INSTRUMENTATION THAT INITIATES OR ISOLATES EMERGENCY COOLING

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (d)</u>	<u>Set-Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
<u>EMERGENCY COOLING INITIATION</u>							
(1) High-Reactor Pressure	2	2	≤ 1080 psig	(b)		x	x
(2) Low-Low Reactor Water Level	2	2	≥ 5 inches (Indicator Scale)	(b)		x	x
<u>EMERGENCY COOLING ISOLATION</u> (for each of two systems)							
(3) High Steam Flow Emergency Cooling System	2	2 (a)	19 psid			x	x



NOTES FOR TABLES 3.6.2c AND 4.6.2c

- (a) Each of two differential pressure switches provide inputs to one instrument channel in each trip system.
- (b) May be bypassed in the cold shutdown condition.
- (c) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2c, the primary sensor will be calibrated and tested once per operating cycle.
- (d) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

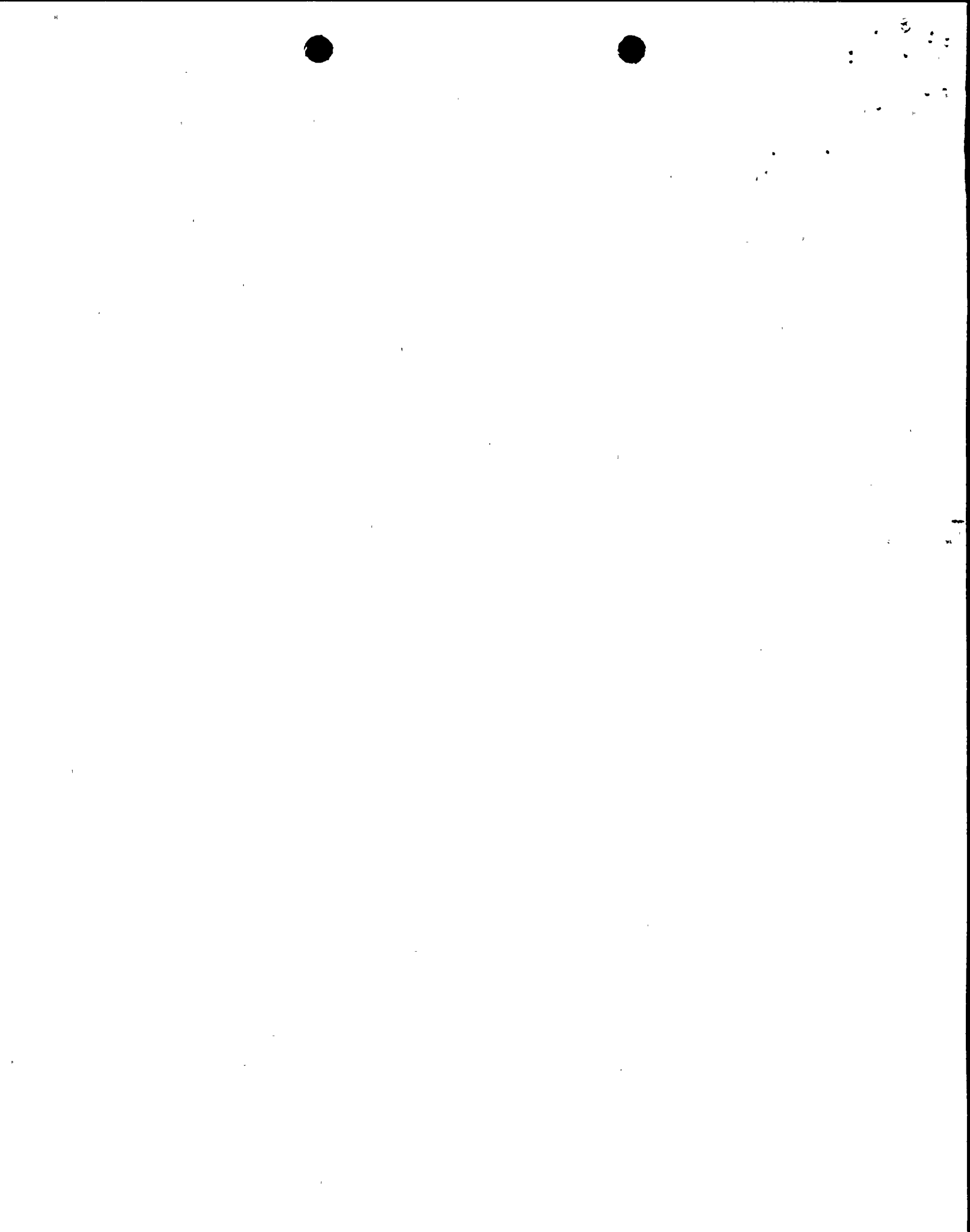


10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Table 3.6.2d

INSTRUMENTATION THAT INITIATES CORE SPRAY^(*)Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels Per Operable Trip System (g)</u>	<u>Setpoint</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
<u>START CORE SPRAY PUMPS</u>							
(1) High Drywell Pressure	2	2	≤ 3.5 psig	(d)	x	(a)	(a)
(2) Low-Low Reactor Water Level	2	2 ^(e)	≥ 5 inches (Indicator Scale)	(b)	x	x	x
<u>OPEN CORE SPRAY DISCHARGE VALVES</u>							
(3) Reactor Pressure and either (1) or (2) above.	2	2	≥ 365 psig	x	x	x	x



NOTES FOR TABLES 3.6.2d AND 4.6.2d

- (a) May be bypassed when necessary for containment inerting.
- (b) May be bypassed when necessary for performing major maintenance as specified in Specification 2.1.1.e.
- (c) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2d, the primary sensor will be calibrated and tested once per operating cycle.
- (d) May be bypassed when necessary for integrated leak rate testing.
- (e) The instrumentation that initiates the Core Spray System is not required to be operable, if there is no fuel in the reactor vessel.
- (f) One instrument channel in each trip system may be bypassed in the cold shutdown and refuel conditions during the Spring 1986 refueling outage to perform the emergency condenser piping replacement.
- (g) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

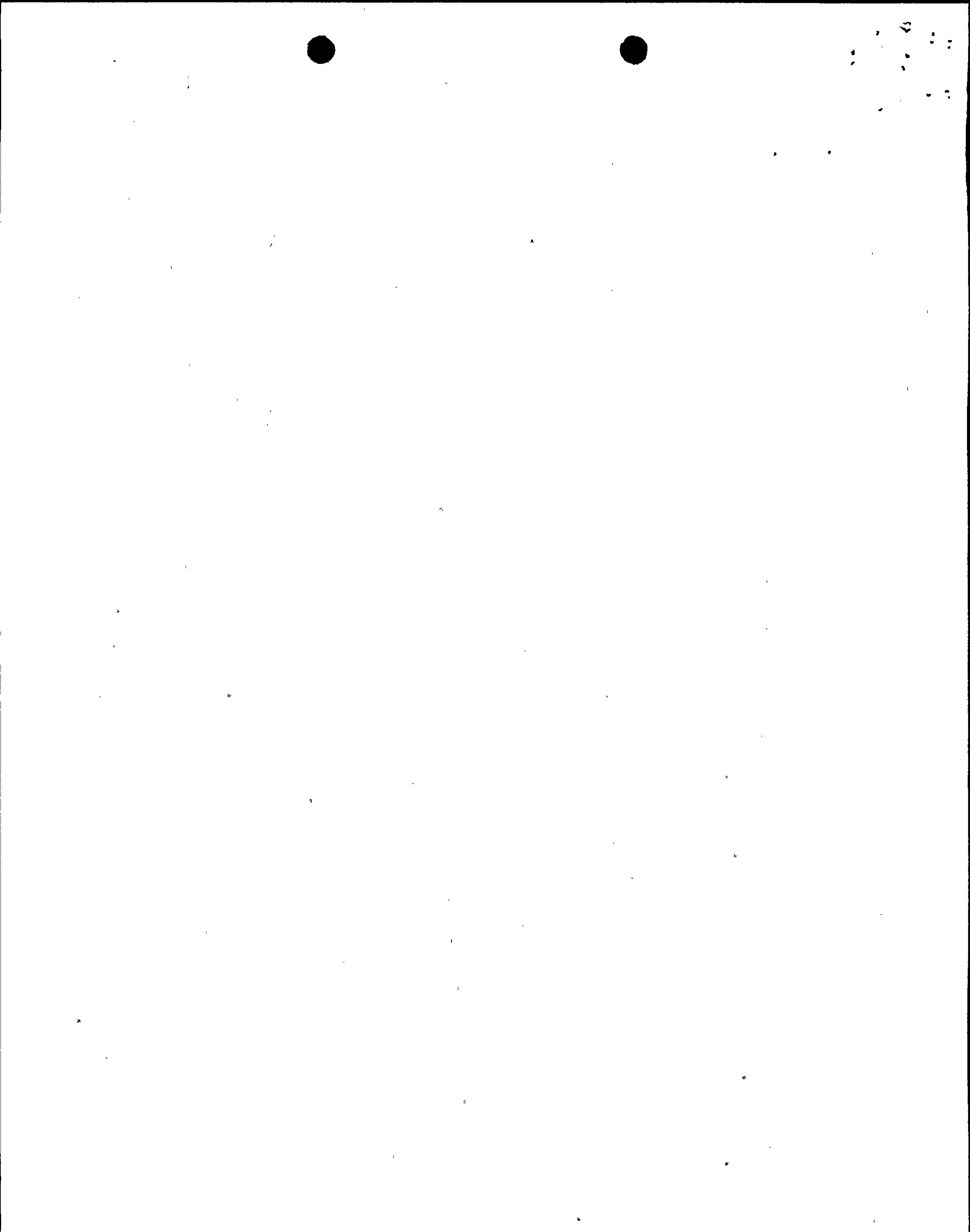
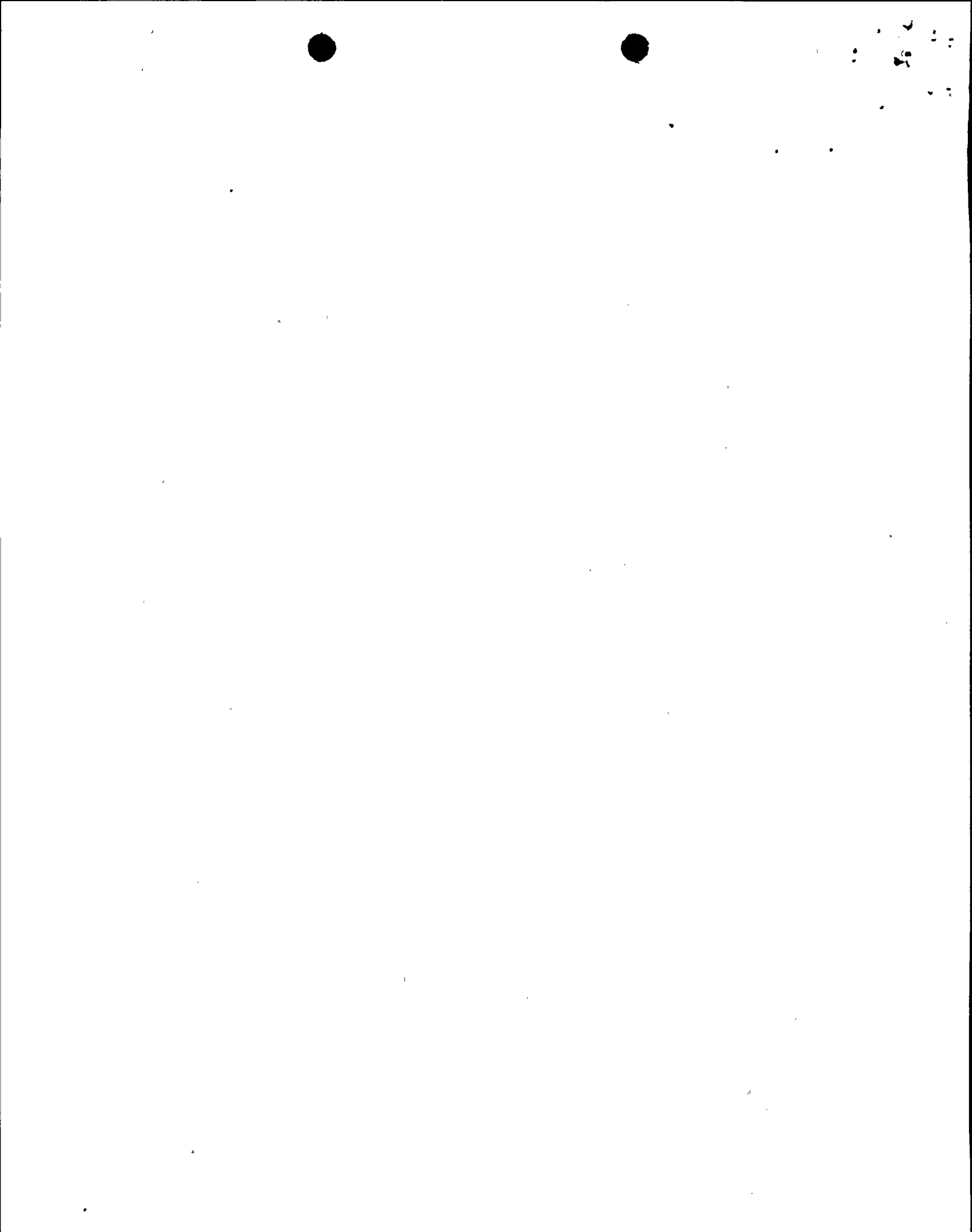


Table 3.6.2e

INSTRUMENTATION THAT INITIATES CONTAINMENT SPRAY

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (c)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(1)a. High Drywell Pressure and b. Low-Low Reactor Water Level	2	2	≤ 3.5 psig	(a)		x	x
	2	2	≥ 5 inches (Indicator Scale)	(a)		x	x



NOTES FOR TABLES 3.6.2e AND 4.6.2e

- (a) May be bypassed in the shutdown mode whenever the reactor coolant temperature is less than 215°F.
- (b) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2e, the primary sensor will be calibrated and tested once per operating cycle.
- (c) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

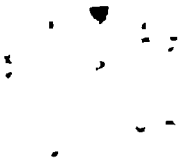


Table 3.6.2f

INSTRUMENTATION THAT INITIATES AUTO DEPRESSURIZATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels Per Operable Trip System (d)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>		
INITIATION						
(1)a. Low-Low-Low Reactor Water Level	2 (a)	2 (a)	\geq -10 inches * (Indicator Scale)	(b)	(b)	x
and						
b. High Drywell Pressure	2 (a)	2 (a)	\leq 3.5 psig	(b)	(b)	x

* greater than (\geq) means less negative



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

NOTES FOR TABLES 3.6.2f AND 4.6.2f

- (a) Both instrument channels in either trip system are required to be energized to initiate auto depressurization. One trip system is powered from power board 102 and the other trip system from power board 103.
- (b) May be bypassed when the reactor pressure is less than 110 psig and the reactor coolant temperature is less than the corresponding saturation temperature.
- (c) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2f, the primary sensor will be calibrated and tested once per operating cycle.
- (d) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

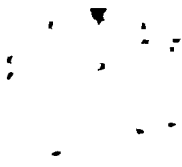


Table 3.6.2h

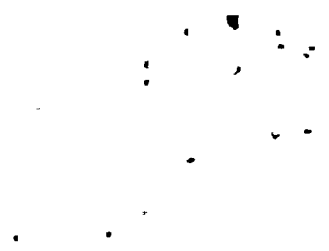
VACUUM PUMP ISOLATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels Per Operable Trip System (b)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>		
------------------	--------------------------------------------------------	---------------------------------------------------------------------------------	------------------	------------------------------------------------------------------------	--	--

MECHANICAL VACUUM PUMP

High Radiation Main Steam Line	2	2	≤ 5 times normal ^(a) background	x	x	x
--------------------------------	---	---	-------------------------------------------------	---	---	---



NOTES FOR TABLES 3.6.2h and 4.6.2h

- (a) Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20% rated power, the normal full-power radiation background level and associated trip and alarm setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip and alarm setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip and alarm setpoints shall be reset within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection or within 12 hours of establishing reactor power levels below 20% rated power, while these functions are required to be operable. At reactor power levels below 20% rated power hydrogen injection shall be terminated and the injection system secured.
- (b) A channel may be placed in an operable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip System is monitoring that parameter. This time interval is extended up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance.

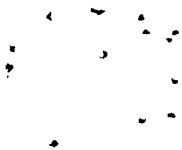


Table 3.6.2i

DIESEL GENERATOR INITIATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Total No. of Channels</u>	<u>Channels⁽¹⁾ to Trip</u>	<u>Minimum Channels Operable (c)</u>	<u>Reactor Mode Switch Position in Which Function Must be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
Loss of Power							
a. 4.16kV PB 102/103 Emergency Bus Undervoltage (Loss of Voltage)	3 per Bus	2 per Bus	2 per Bus	x	x	x	x
b. 4.16kV PB 102/103 Emergency Bus Undervoltage (Degraded Voltage)	3 per Bus	2 per Bus	2 per Bus	x	x	x	x

(1) If one out of three channels becomes inoperable, the inoperable channel will be placed in the trip condition.

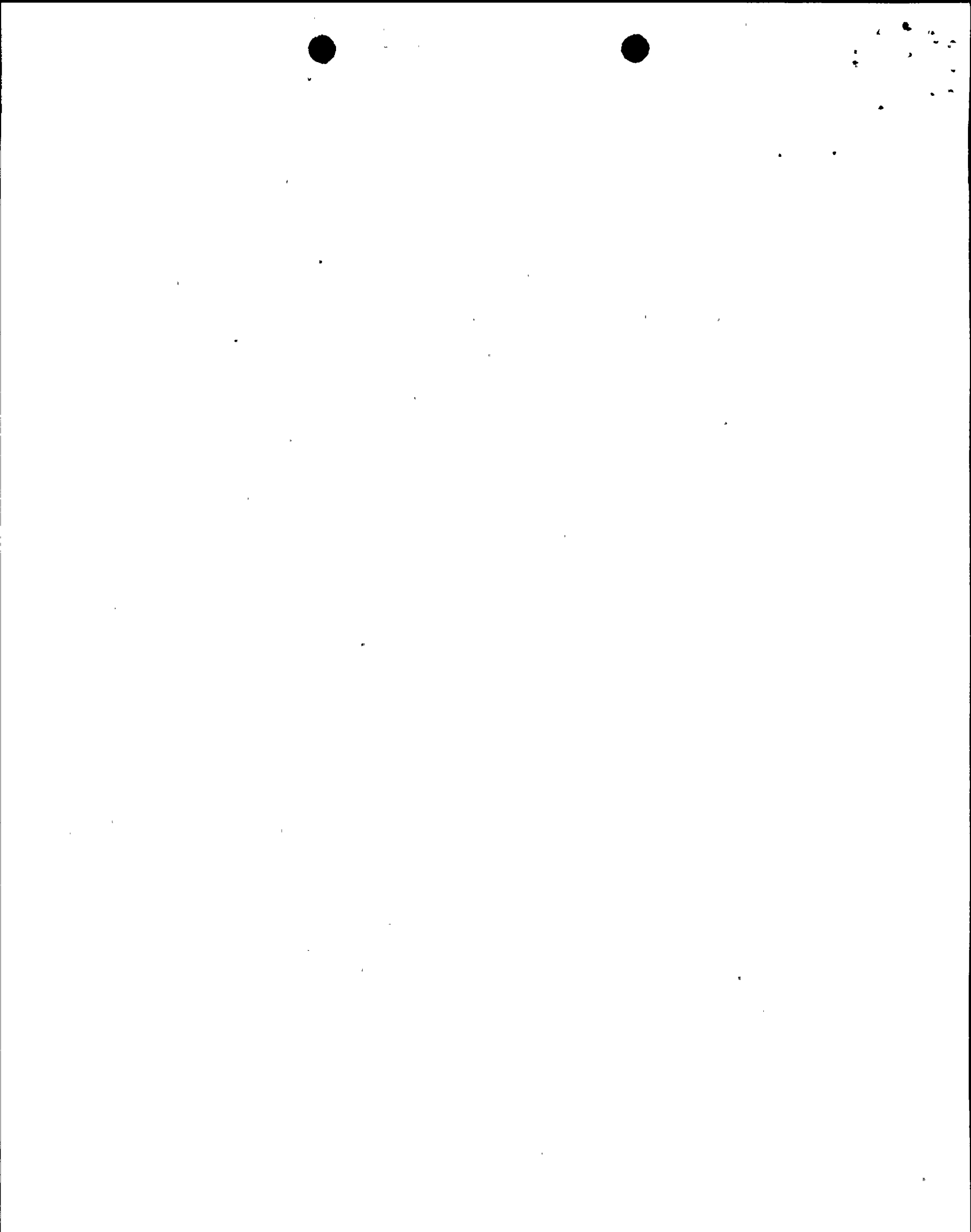


Table 4.6.2i

DIESEL GENERATOR INITIATION

Surveillance Requirements

<u>Parameter</u>	<u>Sensor Check</u>	<u>Instrument^(a) Channel Test</u>	<u>Instrument^(b) Channel Calibration</u>
Loss of Power			
a. 4.16kV PB 102/103 Emergency Bus Undervoltage (Loss of Voltage)	NA	Once per month	Once per refueling cycle
b. 4.16kV PB 102/103 Emergency Bus Undervoltage (Degraded Voltage)	NA	Once per month	Once per refueling cycle

- (a) The instrument channel test demonstrate the operability of the instrument channel by simulating an undervoltage condition to verify that the tripping logic functions properly.
- (b) The instrument channel calibration will demonstrate the operability of the instrument channel by simulating an undervoltage condition to verify that the tripping logic functions properly. In addition, a sensor calibration will be performed to verify the set points listed in Table 3.6.2.i.
- (c) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip System is monitoring that parameter.

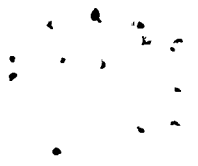


Table 3.6.2k

HIGH PRESSURE COOLANT INJECTION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels Per Operable Trip System (c)</u>	<u>Set-Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(1) Low Reactor Water Level	2	2	≥ 53 inches (Indicator Scale)	(a)		(a)	x
(2) Automatic Turbine Trip	1	1	--	(a)		(a)	x



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

NOTES FOR TABLES 3.6.2k AND 4.6.2k

- (a) May be bypassed when the reactor pressure is less than 110 psig and the reactor coolant temperature is less than the corresponding saturation temperature.
- (b) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2k, the primary sensor will be calibrated and tested once per operating cycle.
- (c) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.



Small, illegible handwritten marks or characters in the top right corner.