Attachment I Proposed Technical Specification Changes

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.8 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-11 shall be OPERABLE.

APPLICABILITY: Whenever equipment protected by the fire detection instrument is required to be OPERABLE.

ACTION:

a. With any, but not more than one-half the total in any fire zone, Function A fire detection instruments shown in Table 3.3-11 inoperable, restore the inoperable instrument(s) to OPERABLE status within 14 days or within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.

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- b. With more than one-half of the Function A fire detection instruments in any fire zone shown in Table 3.3-11 inoperable, or with any Function B fire detection instruments shown in Table 3.3-11 inoperable, or with any two or more adjacent fire detection instruments shown in Table 3.3-11 inoperable, within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.8.1 Each of the above required smoke detection or flame detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

4.3.3.8.2 Each of the above required heat detection instruments shall be demonstrated OPERABLE as follows:

a. For nonrestorable spot-type detectors, at least two detectors out of every hundred, or fraction thereof, shall be removed every 5 years and functionally tested. For each failure that occurs on the detectors removed, two additional detectors shall be removed and tested; and

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INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

SURVEILLANCE REQUIREMENTS (Continued)

b. For restorable spot-type heat detectors, at least one detector on each signal initiating circuit shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Different detectors shall be selected for each test. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.

4.3.3.8.3 The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

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TABLE 3.3-11

FIRE DETECTION INSTRUMENTS

FIRE				MINIMUM INS	TRUMENTS	OPERABLE	
CONE	DESCRIPTION	LO	CATION	SMOKE	FLAME	HEAT	FUNCTION*
1	R.H.R. Pump 18	GG-53	E1.522 + 0	1	0	1	
2	R.H.R. Pump 1A	FF-53	E1.522 + 0	i	Ō	ĩ	
3	Cont. Spray Pump 18	GG-54	E1.522 + 0	3	Ō	i	
4	Cont. Spray Pump 1A	GG-55	E1.522 + 0	2	0	2	
5	R.H.R. Pump 2B	GG-61	E1.522 + 0	ī	0	1	
6	R.H.R. Pump 2A	FF-61	E1.522 + 0	i	0		
7	Cont. Spray Pump 28	GG-60	E1.522 + 0	1.1.1	ñ		
8	Cont. Spray Pump 2A	GG-59	E1.522 + 0	2	ñ	2	
9	Aux. F. W. Pumps	88-51	E1.543 + 0	14	ő	12(6)	ACRI
0	Mech. Pene. Room	JJ-52	E1.543 + 0	3	ő	3	
1	Corridor/Cables	NN-51	E1.543 + 0	6	ñ	6	
2	Recip. Chg. Pump	JJ-53	E1.543 + 0	i	õ	ĩ	
3	Safety Inj Pump 18	HH-53	E1.543 + 0	i	õ	1.1.1	
4	Safety Inj Pump 1A	GG-53	E1.543 + 0		õ	1	
5	Cent. Chg. Pump 18	JJ-54	11.543 + 0	;	0	2	
5	Cent. Chg. Pump 1A	JJ-55	E1.543 + 0	2	õ	2	
1	Aisles/Cables	KK-56	E1.543 + 0	18	õ	18	
8	Aisles/Cables	FE-55	FI 543 + 0	6	ő	6	
9	AFW Pumps (Unit 2)	BB-63	F1 543 + 0	14	õ	12(6)	A(R)
0	Mech. Pene. Room	11-62	F1 543 + 0	1	ő	1	
1	Aisles/Cables	NN-61	F1 543 + 0	ĥ	0	6	
,	Recip, Cha. Pump	11-60	E1 543 + 0	ĩ	õ	i	-
1	Safety Ini. Pumo 28	101-60	F1 543 + 0	· · · · · · · · · · · · · · · · · · ·	0	The second second	
	Safety Ini, Pump 2A	66-60	E1.543 + 0	i	0		
5	Cent. Cha. Pumo 28	.11-59	F1.543 + 0	;	0	2	
6	Cent. Cha. Pumo 2A	11-58	F1 543 + 0	2	ñ	2	
1	Aisles/Cables	KK-59	F1 543 + 0	20	õ	20	
6	Aisles/Cables	FE-58	F1.543 + 0	6	ő	6	
9	SW Gear Fouin, Room	AA-50	F1 560 + 0	ĩ	0	Ô	
n	Flect Pene Room	CC-50	F1 560 + 0	R	Ő	0	
1	Corridor/Cables	FF-53	F1 560 + 0	5	0	5	
2	forridor/Cables	KK-52	F1 560 + 0	8	0	8	
2	Corridor/Cables	NN-54	F1 560 + 0	10	0	10	

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TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

FIRE				MINIMUM IN	STRUMENTS	OPERABLE*	
ZONE	DESCRIPTION	LO	CATION	SMOKE	FLAME	HEAT	FUNCTION**
34	Aisles/Cables	JJ-56	E1.560 + 0	14	0		
35	Motor Control Centers	6G-56	E1.560 + 0	;	ñ		
36	Cable Tray Access	FF-56	E1.568 + 0	;	ő	2	1
37	Equip. Batteries	00-55	E1.554 + 0		ő	1000	1
38	Equip. Batteries	CC-55	E1.554 + 0	5	Ő	1.	
39	Battery Room	CC-56	E1.554 + 0	17	õ	ä	-
41	SW Gear Equip. Room	AA-64	E1.560 + 0	.,	ñ		
42	Elect. Pene. Room	CC-65	E1.560 + 0	A	0		
43	Corrider/Cables	FF-61	£1.560 + 0	5	0		-
44	Aisles/Cables	KK-63	E1.560 + 0	Å	ň	ě	-
45	Aisles/Cables	NN-60	E1.560 + 0	13	ő	11	1
46	Aisles/Cables	HH-59	E1.560 + 0	13	õ	13	
47	Motor Control Center	GG-58	E1.560 + 0	2	ő	2	
48	Cable Tray Access	FF-58	E1.560 + 0	2	ñ	2	-
49	Equip. Batteries	00-60	E1.560 + 0	5	ő		
50	Equip. Batteries	CC-60	E1.560 + 0	5	õ		
51	Battery Room	CC-59	E1.560 + 0	17	A	à	-
53	SW Gear Equip. Room	AA-49	E1.577 + 0	- 7	õ	ő	-
54	Aisles/Cables	CC-50	E1.577 + 0	10	ő	ñ	-
55	Aisles/Cables	NN-52	E1.577 + 0	9	õ	ä	-
56	Aisles/Cables	PP-55	E1.577 + 0	11	0	n	A 100 100
57	Aisles/Cables	11-55	E1.577 + 0	ii	0	ii	
58	Aisles/Cables	HH-55	E1.577 + 0	21	0	21	
59	Motor Control Center	FE-54	E1.577 + 0		0	2	
60	Cable Room	CC-56	E1. 574 + 0	18	0	15	
62	SW Gear Equip, Room	AA-64	EL 577 + 0	7	0	0	
63	Flect, Pene, Room	CC-64	E1 577 + 0	10	0	a	-
64	Aisles/Cables	PP-62	F1 577 + 0	9	Ő	9	
65	Aistes/Cables	PP-59	E1 577 + 0	16	0	16	
66	Aisles/Cables	11-59	F1.577 + 0	ii	â	ii	. 1
67	Aisles/Cables	111-59	E1.577 + 0	21	0	21	
68	Motor Control Center	FF-60	F1 577 + 0	2	0	2	

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TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

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÷	FIRE					MINIMUM INS	TRUMENTS	OPERABL	E*
Ĩ	LONE	DESCRIPTION		U	DCATION	SMOKE	FLANE	HEAT	FUNCTION*
1s	69	Cable Room ·		CC-59	E1.577 + 0	18	0	15	
-	71	Elect Pene. Room		CC-51	E1.594 + 0	10	ő	0	
-	72	Control Room		CC-56	E1.594 + 0	23	õ	6	
N	73	Vent. Equip. Room		FF-56	F1.594 + 0	9	ő	õ	
	74	Aisies/Cables		11-56	E1.594 + 0	25	õ	25	
	76	Aistes/Cables		PP-54	E1.594 + 0	15	ñ	15	
	79	Elect. Pene. Ruom		BR-63	E1 594 + 0	ii	ő		
	60	Control Room		B8-59	E1.594 + 0	22	0	6	
	81	Ven. Equip. Room		FF-58	E1.594 + 0	12		0	-
	82	Aisles/Cables		KK-56	E1.594 + 0	28	ñ	27	
w	84	Aisles/Cables		NN-58	E1.594 + 0	17	0	17	
4	89	Fuel Pool Area #1		PP-50	E1.605 + 10	19	ĩ	19	
	90	Fuel Pool Area (Unit 2)		PP-64	E1.605 + 10	19	7	19	
-	128*	UHI Bldg.		141-44	E1.550 + 0	2	à	2	-
	129	Fuel Pool Purge Room		NH-56	E1.631 + 6	6		6	
	130*	UHI Bldg. (Unit 2)		HH-71	E1.594 + 0	2	3	2	
	131	Reactor Bldg.	0°-45°	Bel.	E1.565 + 3	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	0	ō	
	132	Reactor Bldg.	45°-90°	Bel.	E1.565 + 3	3	0	õ	
	133	Reactor Bldg.	90°-135°	8e1.	E1.565 + 3	4	0	0	Ä
	134	Reactor Bldg.	135°-180	Bet.	E1.565 + 3	5	0	0	
22	135	Reactor Bldg.	180°-225°	Bel.	E1.565 + 3	4	0	0	Ä
	136	Reactor Bldg.	270°-315°	Bel.	E1.565 + 3	3	0	0	
ěě	137	Reactor Bldg.	315°-0°	Bel.	£1.555 + 3	8	0	6	
	138	Reactor Bldg.	0°-45°	Sel.	E1.586 + 3	6	0	0	
22	139	Reactor Bldg.	45°-90°	Bel.	E1.586 + 3	4	0	0	
ZZ	140	Reactor Bldg.	90°-135°	Bel.	E1.565 + 3	3	0	0	A
	141	Reactor Bldg.	135°-160	Bel.	E1.586 + 3	8	0	0	
232	142	Reactor Bldg.	180°-225°	Bel.	£1.586 + 3	5	0	0	
22	143	Reactor Bldg.	315°-0°	Bel.	E1.586 + 3	5	0	0	
22	144	Reactor Bldg.	0°-45°	Bel.	E1.593 + 24	14	0	0	*
	15	Reactor Bldg.	45°-90°	Bei.	E1.593 + 24	17	0	0	
	5	Reactor Rida	90-1350	301	£1 501 + 2L	11	0	6	

in the disconnection of the UHI System from the Reactor Coolant System, these specifications are no ier applicable.

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TABLE 3. 3-11 (Continued)

FIRE DETECTION INSTRUMENTS

IRE			MI	NIMIN INS	TRUMENTS	OPERABLE*	
OWE	DESCRIPTION	LOCATE	24 j	SMOOLE	FLAME	HEAT	FUNCTION
47	Reactor Bldd.	135°-180°	Bel. E1. 593 + 25	10	0	0	٨
48	Reactor Bldg.	180°-225°	Bet. E1.593 + 25	2	0	0	
49	Reactor Bldg.	315°-0°	Bet. £1.593 + 24	7	0	0	
50	Reactor Bldg. (Unit 2)	6°-45°	Sel. El.565 + 3	4	0	0	
51	Reactor Bldg. (Unit 2)	45°-96°	Bel. El.565 + 3	3	0	0	
52	Reactor Bldg. (Unit 2)	90°-135-	Bel. E1.565 + 3	4	G	0	
53	Reactor Bidg. (Unit 2)	135°-189°	Bel. E1.565 + 3	5	0	0	
54	Reactor Bldg. (Unit 2)	180*-225°	3el. El.565 + 3	3	0	0	
55	Reactor Bldg. (Unit 2)	270°-315°	Bel. El.565 + 3	4	0	0	
56	Reactor Bldg. (Unit 2)	315°-0°	Bel. E1.565 + 3	6	0	0	
57	Reactor Bldg. (Unit 2)	0°-45°	Rel. El. 586 + 6	6	0	0	
58	Reactor Bldg. (Unit 2)	45°-90°	Rel. El.596 + 6	4	0	0	A
59	Reactor Bldg. (Unit 2)	90°-135°	Sel. El.586 + 6	3	0	0	
60	Reactor Bldg. (Unit 2)	135°-100°	Sel. E1.586 + 6	8	0	0	
61	Reactor Bldg. (Unit 2)	180°-225°	Bel. 11.586 + 6	5	0	0	*
62	Reactor Bldg. (Unit 2)	315°-0°	Bel. El.586 + 6	5	0	0	
63	Reactor Bldg. (Unit 2)	0°-45°	Bel. E1.593 + 25	13	0	0	
64	Reactor 3ide. (Unit 2)	450-500	Rel. £1.593 + 24	17	0	0	
65	Reactor Gldg. (Unit 2)	90°-135°	307. E1.593 + 25	13	0	0	A .
66	Reactor 81dg. (Unit 2)	135°-106°	3e1. E1.593 + 25	10	0	C	
67	Reactor Bldg. (Unit 2)	180°-225°	Bel. E1.593 + 25	2	0	0	
6.8	Reactor Bldg (Unit 2)	315°-0°	Bel. E1.593 + 25	7	0	0	A
60	PCP-1A	Reactor Bldg	F1. 503 + 24	9	0	1	
170	PCP-1R	Bearton 21da	F1 593 + 25	0	0	i	
71	BCP-1C	Reactor Bldg	F1 593 + 24	0	0	i	A.
72	PCP-10	Reactor Rido	F1. 593 + 24	0	0	1	
73	PCP-24	K.	Bel. E1.593 + 24	0	0	1	
74	00-28	1350	Bel. E1.533 + 24	0	0	1 :	
176	DCD-20	2250	Bel. El. 593 + 24	0	0	1	
173	PC0-20	3153	Rel F1 593 + 25	0	0	1	A .
170	filter Red Unit 18	Gearlos Rido	Set F1 565 + 1	2	0	2	
	Ciller Bed Unit 14	Reactor Bldg	Bet FI 565 + 3	2	0	2	A 1

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82. Annulus File64+0 File64+0 83. Annulus Antslex/Cables File64+0 84. Anu. Batt. An+55 File52+6 Anu. Cont. Annulus An+55 File52+6 Anu. Cont. Annulus An+55 File56+10 Anu. Cont. Annulus An+55 File56+10 Antiock Access (unit 2) An+52 File56+10 Antiock Access (unit 2) Ju+52 File60+10	81f Annulus			E1.649 + 5				•
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1 Fuel Pool Purge Room (Bait 2) NW-64 EL-50	Annulus			E1.649 + 5			-	
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b)/G Corridor 60-45 FL-556+0 3 0 b)/G Corridor 66-45 FL-556+0 3 0 2 b)/G Corridor 66-45 FL-556+0 3 0 2 2 b)/G Corridor 66-45 FL-556+0 3 0 2 2 2 b)/G Corridor 66-65 FL-550+0 6 2	5 0/6 Corridon		AA-59	El. 560 + 0	•••		•	*
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Reactor Bldg. (Unit 1) 260°-303° Rel. E1.650 + 10 10 0 8 0 8 10 10 10 10 10 10 10 10 10 10 10 10 10	RN Pump Strue	chure.	West Section	£1.600 + 0			•	
Reactor Bldg. (Unit 2) 260°-303° Rel. El. 668 + 10 10 0 0 0 HVAC Dect for Rooms 331 and 332 FF-53, 543 + 0 200 10 10 10 0 0 0	Reactor Bldo	(Ikit I)	iter Section	F1.636 + 0				
HVAC Dect for Rooms 331 and 332 FF-53, 543 : 0 8e1. E1.668 + 10 10 0 0	Reactor Bldg	(Unit 2)	200- 303°	Rel. El. 668 + 10	10			
0 1 EVS . FC-11 266 Bits Tor	HVAC DEACT FOR	r Roms 331 and 33	Sfit _ 007	Rel. [1.668 + 10	10 6	-		
			6 H-53, 543 + 6		I(Buct)	0		

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CATAWEA - UNITS 1 & 2

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IABLE 3. 3-11 (Continued) FIRE SCIECTICN INSIRUMENTS

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TABLE 3.3-11 (Lontinued)

FIRE DETECTION INSTRUMENTS

FIRE			MINIMUM INST	RUMENTS	OPERABLE*	
ZONE	DESCRIPTION	LOCATION	SMDKE	FLAME	HEAT	FUNCTION**
185	HVAC Duct for Rooms 203, 205 205A, 206A, 206B, 207 and 209A	MM-60. 543 * 0	l(Duct)	0	0	٨
186	HVAC Duct for Rooms 301, 302, 305, and 307	NH-60, 560 + 6	1(Duct)	0	0	•
REIA	Diesel Generator 1A	£E-41, 556 + G	0	0	9(10)	A(B)
RF 18	Diesel Generator 18	AA-41, 556 + 0	0	0	0(10)	A(B)
RE 2A	Diesel Generator 2A	EE-72, 556 · 0	0	0	0(10)	A(B)
RF 2B	Diesel Generator 28	AA-72, 556 + 0	0	0	0(10)	A(E)

CATAWBA - UNITS 1 & 2

*The fire detection instruments located within the containment are not required to be OPERABLE during the performance of Type A Containment Leakage Rate Lests.

**Function A: Early warning fire detection and notification only.

function B: Actuation of fire suppression system and early warning and notification.

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PLANT SYSTEMS

3/4.7.10 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.10.1 The Fire Suppression Water System shall be OPERABLE with:

- a. At least two fire suppression pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header, and
- b. An OPERABLE flow path capable of taking suction from Lake Wylie and transferring the water through distribution piping with OPERABLE sectionalizing control valves and isolation valves for each sprinkler, hose standpipe, or Spray System riser required to be OPERABLE per Specifications 3.7.10.2 and 3.7.10.4.

APPLICABILITY: At all times.

ACTION:

- a. With one of the above required pumps and/or one Water Supply/Distribution System inorerable, restore the inoperable equipment to OPERABLE status within 7 days or provide an alternate backup pump or supply. The provisions of Specification 3.0.3 are not applicable.
- b. With the Fire Suppression Water System otherwise inoperable establish a backup Fire Suppression Water System within 24 hours.

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PLANT SYSTEMS

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SURVEILLANCE REQUIREMENTS

- 4.7.10.1 The Fire Suppression Water System shall be demonstrated OPERABLE:
 - a. At least once per 31 days on a STAGGERED TEST BASIS by starting each electric motor-driven pump and operating it for at least 15 minutes on recirculation flow.

[Removed]

- b. At least once per 31 days by verifying that each valve (manual, poweroperated, or automatic) in the flow path which is accessible during plant operations is in its correct position.
- c. At least once per 6 months by performance of a system flush of the outside distribution loop to verify no flow blockage by fully opening the hydraulically most remote hydrant.
- d. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- e. At least once per 18 months by verifying that each value (menual, power-operated, or automatic) in the flow path which is inaccessible during plant operations is in its correct position.
- At least once per 18 months by performing a system functional test which includes simulated submatic actuation of the system throughout its operating sequence, and:
 - verifying that each automatic valve in the flow path actuates to its correct position,
 - Verifying that each pump develops at least 2500 gpm at a net pressure of 144 psig by testing at three points on the pump performance curve,
 - Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
 - 4) Verifying that each fire suppression pump starts within 10 psig of its intended starting pressure (A pump, primary switch-95 psig; B pump, primary switch-90 psig; and C pump, primary switch-85 psig).
- g. At least once per 3 years by performing a flow test of the system in accordance with Chapter 8, Section 16 of the Fire Protection Handbook, 15th Edition, published by the National Fire Protection Association.

[Removed] PLANT SYSTEMS SPRAY AND/OR SPRINKLER SYSTEMS LIMITING CONDITION FOR OPERATION 3.7.10.2 The following Spray and/or Sprinkler Systems shall be OPERABLE: Elevation 522 + 0 ft - Auxiliary Building a., Room No. Equipment RHR & Containment Spray Sump Pump Area 100 101 Corridor 104 RHR PUMP 18 105 RHR PUMP 1A 106 Corridor 109 RHR Pump 28 110 RHR PUMP 2A 111 Corridor 112 Carridor Elevation 543 + 0 ft - Auxiliary Building b. 230 Cent. Chg. Pump 1A 231 Cent. Chg. Pump 18 Cent. Chg. Pump 2A 240 24" Carit. Chg. Pump 28 250 Unit 1 Aux. Feedwater Pump Room 260 Unit 2 Aux. Feedwater Pump Room Elevation 504 + 0 ft - Auxiliary Building C. 340 Battery Room Corridor (DD-EE) 350 Battery Room Corridor (DD-SE)

d. Elevation 560 + 0 ft - Auxiliary Building 300 Component Cooling

Component Cooling Pumps 1A1, 1A2, 1B1 & 1B2

e. Elevation 574 + 0 ft = Auxiliary Building

Cable Room Corridor (DD-EE) Cable Room Corridor (DD-EE)

- f. Elevation 577 + 0 ft Auxiliary Building 400 Component Cooling Pumps 2A1, 2A2, 2B1 & 2B2
- g. Reactor Buildings

480

490

Annulus Pipe Corridor

Pipe Corridor

APPLICABILITY: Whenever equipment protected by the Spray/Sprinkler System is required to be OPERABLE.

ACTION:

- a. With one or more of the above required Spray and/or Sprinkler Systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

CATAWBA - UNITS 1 & 2

PLANT SYSTEMS

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SURVEILLANCE REQUIREMENTS

4.7.10.2 Each of the above required Spray and/or Sprinkler Systems shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, poweroperated, or automatic) in the flow path which is accessible during plant operations is in its correct position.

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- b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- c. At least once per 18 months by verifying that each valve (manual, power-operated, or automatic) in the flow path which is inaccessible during plant operations is in its correct position, and
- d. At least once per 18 months:
 - By performing a system functional test which includes simulated automatic actuation of the system, and cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
 - By a visual inspection of each Sprinkler System starting at the system isolation value to verify the system's integrity; and
 - By a visual inspection of each nozzle's spray area to verify the spray pattern is not obstructed.

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PLANT SYSTEMS

CO, SYSTEMS

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LIMITING CONDITION FOR OPERATION

3.7.10.3 The following High Pressure and Low Pressure CO2 Systems shall be

- 4.
- Low Pressure CO2 System Diesel generator rooms, and b.

High Pressure CO2 System - Auxiliary feedwater pump rooms.

APPLICABILITY: Whenever equipment protected by the CO2 Systems is required to

ACTION:

- with one or more of the above required CO2 Systems inoperable, 4. within I hour establish a continuous fire watch with backup fire suppression equipmont for those sreas in which redundant systems or components could be damaged; for other areas, establish on hourly
- The provisions of Specification 3.0.3 are not applicable. D.

SURVEILLANCE REQUIREMENTS

4.7.10.3.1 Each of the above required CO₂ Systems shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow path is in its correct position.

4.7.10.3.2 Each of the above required Low Pressure CO2 Systems shall be

- At least once per 7 days by verifying the CO_2 storage tank level to a. be greater than 44% of full capacity, and
- At least once per 18 months by verifying: b.
 - Each system actuates manually and automatically, upon receipt 1) of a simulated actuation signal,
 - Damper closure devices receive an actuation signal upon system 2)
 - 3) By a visual inspection of discharge nozzles to assure no

CATAWBA - UNITS 1 & 2

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PLANT SYSTEMS

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SURVEILLANCE REQUIREMENTS (Continued)

4.7.10.3.3 Each of the above required High Pressure CO_2 Systems shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying the weight of each CO_2 storage cylinder to be at least 90% of full charge weight, and
- b. At least once per 18 months by:
 - Verifying each system actuates manually and automatically upon receipt of a simulated actuation signal.
 - Verifying that damper closure devices receive an actuation signal upon system operation, and
 - A visual inspection of the discharge nozzles to assure no blockage.

[Removed]

PLANT SYSTEMS

FIRE HOSE STATIONS

LIMITING CONDITION FOR OPERATION

3.7.10.4 The fire hose stations given in Table 3.7-3 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

ACTION:

- With one or more of the fire hose stations given in Table 3.7-3 2. inoperable, provide gated wye(s) on the nearest OPERABLE hose station(s). One outlet of the wye shall be connected to the standard length of hose provided for the hose station. The second outlet of the wye shall be connected to a length of hose sufficient to provide coverage for the area left unprotected by the inoperable hose station. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to station personnel, plant equipment, or the hose itself, the fire hose shall be stored in a roll at the outlet of the OPERABLE hose station. Signs shall be mounted above the gated wye(s) to identify the proper hose to use. The above ACTION requirement shall be accomplianed within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise routs the additional hose within 24 hours.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.10.4 Each of the fire hose stations given in Table 3.7-3 shall be demonstrated OPERABLE:

- a. At least once per 31 days, by a visual inspection of the fire hose stations accessible during plant operations to assure all required equipment is at the station.
- b. At least once per 18 months, by:
 - Visual inspection of the stations not accessible during plant operations to assure all required equipment is at the station,
 - 2) Removing the hose for inspection and reracking, and
 - Inspecting all gaskets and replacing any degraded gaskets in the couplings.
- c. At least once per 3 years, by:
 - Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage, and
 - Conducting a hose hydrostatic test at a pressure of 200 psig or at least 50 psig above maximum fire main operating pressure, whichever is greater.

[Removed]

TABLE 3.7-3

FIRE HOSE STATIONS

LOCATION	ELEVATION	HOSE RACK .
1. Auxiliary Building		
59, FF	522+0	18F235
55, FF	522+0	IRF248
63-64, KK	543+0	185210
63, MM	543+0	105211
60, MM	543+0	105212
58. PP	543+0	105210
59. GG-HH	543+0	195936
60-61, FF-GG	543+0	105337
63, CC	543+0	105220
57. 33	543+0	105240
54-55, GG	543+0	105240
57.FF	542+0	IRF 245
52-52 GG	5//3+0	187250
51, CC	643+0	18,255
50-51. JJ-FK	54340	161256
54. 10	543+0	INF 202 •
50-5 NN	543+0	187208
62 M-NL	560+0	1852/1
67 11-KK	560+0	1KF 203
58 00	560+0	1RF 213
56 NN	560+0	185219
50, 14	560+0	1RF220
	560+0	1RF239
54-55 FE. 00	560+0	1RF213
54-55, FF-66	560+0	1RF251
51, KK	560+0	185263
52, MT-NN	563+0	1RF269
58, BE	554+0	1RF484
55, BB-CC	560+0	1RF485
62, AA-88	550+0	1RF486
50. 58	554+0	1RF487
52, AA-88	560+0	1RF488
49, BB-CC	560+0	1RF489
68-69, 88	560+0	1RF996
45-46, 88	560+0	1RF997
63, NN	577+0	1RF204
61, LL	577+0	1RF214
63, KK-LL	577+0	1RF215
58, PP	577+0	1RF221
59, JJ	577+0	1RF230
58, GG	577+0	1RF240
56, KK	577+0	1RF244
54, GG	577+0	1RF.252
52-53, KK	577+0	1RF258
51. KK	577+0	1RF264
51-52. NN	577+0	18F272
56. PP	577+0	18F278
68-69 BR	577+0	18F478
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TABLE 3.7-3 (Continued)

FIRE HOSE STATIONS

LOCATION	ELEVATION	HOSE RACK #
65, BB-CC	577+0	1RF479
59, DD	574+0	1RF480
60, AA	574+0	1RF481
49, BB-CC	577+0	1RF490
45, 88	577+0	1RF491
55, 00	574+0	1RF492
54, AA	574+0	1RF493
63, AA	577+0	1RF993
51, AA	577+0	18F998
62, NN	594+0	1RF205
57, 14	594+0	1RF222
63, JJ	594+0	1RF231
57, Hri	594+0	18F245
57, EE	594+0	185253
51, JJ	594+0	185259
53, NN	594+0	18F275
64, BB	534+0	IRFCA: - P
50, 88	594+0	IRFORS
51, KK	605+10	165265
63. JJ	605+10	18F233
63-64, MM	631+6	18F483
50-51, MH	631+6	1RF495
2. Fuel Pools		
65. TT-UU	605+10	18F208
48, TT-UU	605+10	18F276
63-64, MM	605+10	18F482
50-51, MM	605+10	1RF822
3. Nuclear Service Water	Pump Structure	
East Section	600+0	1RF939
West Section	600+0	1RF940



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CATAWBA - UNITS 1 & 2

PLANT SYSTEMS

3/4.7.11 FIRE BARRIER PENETRATIONS

LIMITING CONDITION FOR OPERATION

3.7.11 All fire barrier penetrations (walls, floor/ceilings, cable tray enclosures and other fire barriers) separating safety-related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable, piping, and ventilation duct pene-tration seals) shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

with one or more of the above required fire barrier constrations . and/or sealing devices inoperable, within 1 hour either establish a continuous fire watch on at least one side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one side of the inoperable penetration and establish an hourly fire watch patrol.

The provisions of Specification 3.0.3 are not applicable. b.

This specification and

its Bases Removed

SURVEILLANC REQUIREMENTS

4.7.11.1 At least once per 18 months the above requires fire barrier penetrations and sealing devices shall be verified OPERABLE by performing a

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The exposed surfaces of each fire rated assembly; b.

At least 10% of all fire dampers. If apparent changes in appearance or abnormal degradation are found, a visual inspection of an additional 10% of the dampers shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each fire damper will be inspected every 15 years; and

At least 10% of each type of sealed penetration. If apparent changes C. in appearance or abnormal degradations are found, a visual inspection of an additional 10% of each type of sealed penetration shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each penetration seal will be

CATAWBA - UNITS 1 & 2

3/4 7-36

Amendment No. 48 (Unit 1 Amendment No. 41 (Unit 2)

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.11.2 Each of the above required fire doors shall be verified OPERABLE by inspecting the closing mechanism and latches at least once per 6 months, and by verifying:

 The position of each interior closed fire door at least once per 24 hours,

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[Removed]

- b. The OPERABILITY of the fire door supervision system for each electrically supervised fire door by performing a TRIP ACTUATING DEVICE OPERATIONAL TEST at least once per 31 days, and
- c. That each locked closed fire door is closed at least once per 7 days.

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INSTRUMENTATION

BASES

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REMOTE SHUTDOWN SYSTEM (Continued)

control and power circuits and transfer switches necessary to eliminate effects of the fire and allow operation of instrumentation, control and power circuits required to achieve and maintain a safe shutdown condition are independent of areas where a fire could damage systems normally used to shutdown the reactor. This capability is consistent with General Design Criterion 3 and Appendix R to 10 CFR Part 50.

3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, Revision 3, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Conditions.During and Following an Accident," May 1983 and NUREG 0737, "Clarification of TMI Action Plan Requirements," November 1980.

3/4.3.3.7 CHLORINE DETECTION SYSTEMS

The OPERABILITY of the Chlorine Detection Systems ensures that sufficient capability is available to promptly detect and initiate protective action in the event of an accidental chlorine release. This capability is required to protect control room personnel and is consistent with the recommendations of Regulatory Guide 1.95, Revision 1, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release," January 1977.

Deletecl

3/4.3.9.8 FIRE DETECTION INSTRUMENTATION

OPERABILITY of the detection instrumentation ensures that both adequate warning capability is available for prompt detection of fires and that Fire Suppression Systems, that are actuated by fire detectors, will discharge extinguishing agents in a timely manner. Prompt detection and suppression of fires will reduce the potential for damage to safety-related equipment and is an integral element in the overall facility Fire Protection Program.

Fire detectors that are used to actuate Fire Suppression Systems represent a more critically important component of a plant's Fire Protection Program than detectors that are installed solely for early fire warning and notification. Consequently, the minimum number of OPERABLE fire detectors must be greater.

The loss of detection capability for Fire Suppression Systems, actuated by fire detectors, represents a significant degradation of fire protection fr

INSTRUMENTATION

BASES

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FIRE DETECTION INSTRUMENTATION (Continued) Deleted

any area. As a result, the establishment of a fire watch Datrol must be initiated at an earlier stage than would be warranted for the loss of detectors that provide only early fire warning. The establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY.

3/4.3.3.9 LOOSE-PART DETECTION SYSTEM

The OPERABAILITY of the loose-part detection instrumentation ensures that sufficient capability is available to detect loose metallic parts in the Reactor System and avoid or mitigate damage to Reactor System components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Fart Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

3/4.3.3.10 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjuated in accordance with the methodology and parameters in the ODCM to ensure that the operaBILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63 and 64 of Appendix A to 10 CFR Part 50.

3/4.3.3.11 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the UDCM to ensure that the instrumentation also includes provisions for monitoring (and controlling) the SYSTEM. The OPERABILITY and use of this instrumentation is consistent with 10 CFR Part 50. The sensitivity of any noble gas activity monitor used to show compliance with the gaseous effluent release requirements of Specificameasurable.

CATAWBA - UNITS 1 & 2

PLANT SYSTEMS

BASES

SNUBBERS (Continued)

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubbers, seal replaced, spring replaced, in high radiation area, in high temperature area. etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life.

3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring loak testing, including alpha emitters, is based on 10 CFR 70.39(a)(3) limits for plutonium. This limitation will ensure that leakage from Byproduct, Source, and Special Nuclear Material sources will not exceed allowable intake values.

Sealed sources are classified into three groups according to their use, with Surveillance Requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e. sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.7.10 FIRE SUPPRESSION SYSTEMS

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The OPERABLLITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO_2 , and fire nose stations. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

PLANT SYSTEMS

BASES

FIRE SUPPRESSION SYSTEMS (Continued)

In the event the Fire Suppression Water System Decomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

1/4.7.11 FIRE BARRIER PENETRATIONS

The functional integrity of the fire barrier penetrations ensures that fires while confined or adequately retarded from spreading to adjatent portions of the facility. These design featbres minimize the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishing of the fire. The fire barrier penetrations are a passive element in the facility fire protection program and are subject to perfedic inspections.

Fire barrier penetrations, including cable penetration barriers, fire doors fire dampers, and other fire barriers are considered functional when the visually observed condition is the same as the as-designed condition. For those fire barrier penetrations that are not in the as-designed condition. an evaluation shall be performed to show that the modification has not degraded the fire rating of the fire barrier penetration.

Quring periods of time when a barrier is not functional, either: (1) a continuous fire watch is required to be maintained in the vicinity of the affected barrier, or (2) the fire detectors on at least one side of the affected barrier must be verified GPERABLE and an inpurity fire watch patrol established, until the barrier is restored to functional status.

3/4.7.12 GROUNDWATER LEVEL

This specification is provided to ensure that groundwater levels will be monitored and prevented from rising to unacceptable levels. High groundwater levels could result in unacceptable structural stresses in the Containment and/or Auxiliary Building due to uplift and hydrostatic forces during design basis events. Although these buildings have been statically analyzed to withstand soil pressure along with the uplift and hydrostatic forces resulting from groundwater rebound to yard elevation (593'6"), this analysis did not include any other loadings and was not a design condition for these buildings.



ADMINISTRATIVE CONTROL

UNIT STAFF (Continued)

- c. A Health Physics Technician* shall be on site when fuel is in either reactor;
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation; avai

e. A site Fire Brigade of at least five members' shall be asintained on site at all times. The Fire Brigade shall not include the three members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emorgenacy and

f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions (e.g., licensed Senior Operators, licensed Operators, health physicists, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for rafueling, major maintenance, or major plant modification, on a tempor rary basis the following guidelines shall be followed:

- An individual should not be permitted to work more than 16 hours straight. excluding shift turnover time.
- 2) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
- A break of at least 8 hours should be allowed between work periods, including shift turnover time.
- Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the Station Manager or his designee, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

The Health Physics Technician end Fire Rrighte people ities may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

CATAWBA - UNITS 1 & 2

Amendment No. 56 (Unit 1) Amendment No. 49 (Unit 2)

ADMINISTRATIVE CONTROLS

TECHNICAL REVIEW AND CONTROL ACTIVITIES (Continued)

6.5.1.6 All REPORTABLE EVENTS and all violations of Technical Specifications shall be investigated and a report prepared which evaluates the occurrence and which provides recommendations to prevent recurrence. Such reports thall be approved by the Station Manager and transmitted to the Vice President, Nuclear Production, and to the Director of the Nuclear Safety Review Board.

6.5.1.7 The Station Manager shall assure the performance of special reviews and investigations, and the preparation and submittal of reports thereon, as requested by the Vice President, Nuclear Production.

6.5.1.8 The station security program, and implementing procedures shall be reviewed at least once per 12 months. Recommended changes shall be approved by the Superintendent of Station Services and transmitted to the Vice President, Nuclear Production, and to the Director of the Nuclear Safety Review Board.

6.5.1.9 The station emergency plan, and implementing procedures, shall be reviewed at least once per 12 months. Recommended changes shall be approved by the Station Manager and transmitted to the Vice President, Nuclear Production, and to the Director of the Nuclear Safety Review Board.

6.5.1.10 The Station Manager shall assure the performance of a review by a qualified individual/organization of every unplanned onsite release of radio-active material to the environs including the preparation and forwarding of reports covering evaluation, recommendations, and disposition of the corrective ACTION to prevent recurrence to the Vice President, Nuclear Production and to the Nuclear Safety Review Board.

6.5.1.11 The Station Manager shall assure the performance of a review by a qualifed individual/organization of changes to the PROCESS CONTROL PROGRAM, OFFSITE DOSE CALCULATION MANUAL, and Radwaste Treatment Systems.

6.5.1. Reports documenting each of the activities performed under Specifications 6.5.1.1 through 6.5.1.11 shall be maintained. Copies shall be provided to the Vice President, Nuclear Production, and the Nuclear Safety Review Board.

6.5.2 NUCLEAR SAFETY REVIEW BOARD (NSRB)

FUNCTION

Insert From next

6.5.2.1 The NSRB shall function to provide independent review and audit of designated activities in the areas of:

- a. Nuclear power plant operations,
- b. Nuclear engineering,
- c. Chemistry and radiochemistry,

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6.5.1.12 The Station Manager shall assure the performance of a review by a qualified individual/organization of the Fire Protection Program and implementing procedures and Submittal of recommended changes to the Nuclear Safety Review Board.

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h. Fire Protection Program Implementation. i. Commitments Contained in FSAR Chapter 16.0

ADMINISTRATIVE CONTROLS

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978;
- The emergency operating procedures required to implement the requirements of NUREG-0737 and Supplement No. 1 to NUREG-0737 as stated in Generic Letter No. 82-33;
- c. Security Plan implementation;*
- d. Emergency Plan implementation;
- e. PROCESS CONTROL PROGRAM implementation:
- 1. OFFSITE DOSE CALCULATION MANUAL implementation; and
- g. Quality Assurance Program implementation for effluent and anvironmental monitoring;

6.8.2 Each procedure of Specification 6.8.1, and changes thereto, shall be reviewed and approved by the Station Manager; or by: (1) Operating Superintendent, (2) Technical Services Superintendent, (3) Maintenance Superintendent, or (4) Superintendent of Integrated Scheduling, as previously designated by the Station Manager; prior to implementation and shall be reviewed periodically as set forth in administrative procedures.

6.8.3 Temporary changes to procedures of Specification 6.8.1 may be made provided:

- a. The intent of the original procedure is not altered;
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Operator license on the unit affected; and
- c. The change is documented, reviewed, and approved by the Station Manager; or by: (1) Operating Superintendent, (2) Technical Services Superintendent, (3) Maintenance Superintendent, or (4) Superintendent of Integrated Scheduling, as previously designated by the Station Manager; within 14 days of implementation.

6.8.4 The following programs shall be established, implemented, and maintained:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the containment spray. Safety Injection, chemical

*Review and approval may be performed by the Superintendent of Station Services.

CATAWBA - UNITS 1 & 2

Amendment No. 27 (Unit 1) Amendment No. 17 (Unit 2) ATTACHMENT 11 PROPOSED FSAR REVISION

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Portable fire extinguishers shall be inspected periodically for full charge and physical condition. Extinguishers shall be checked on a programmed schedule.

9.5.1.5 Personnel Qualification and Training

Fire brigade training and refresher training is conducted in accordance with guidelines from NFPA 27. Administrative procedures, controls and fire brigade are discussed in a separate submittal, "Response to Appendix A to Branch Technical Position APCSB 9.5-1".

Station directives require each shift to have members to perform specified duties on the fire brigade which include fire drills on a scheduled and un-scheduled basis. Fire drills are reviewed and evaluated by plant personnel and insurance representatives.

9.5.2 COMMUNICATIONS SYSTEMS

9.5.2.1 Design Bases

The Catawba communication systems are designed to provide reliable intraplant and plant-to-offsite communications, and offsite emergency communications with public safety agencies.

The private automatic business exchange telephone system and the public address system provide diverse means of communication to all critical areas of the station during normal and emergency conditions. Additionally, a sound powered telephone system is provided between the auxiliary shutdown panel and selected locations in the plant. These diverse communication systems are independent of each other to assure effective communications assuming a single failure.

9.5.2.2 System Description

9.5.2.2.1 Intraplant Telephone System

The private automatic business exchange (PABX) telephone system provides independent private intraplant telephone communications throughout the vital areas of the station. The locations of PABX telephone stations are indicated on Figures 9.5.2-1 through 9.5.2-15.

To assure its functional operability, the PABX telephone switch is provided with redundant common controls, critical electronics, and power supplies.

The PABX system is connected to the Intraplant Public Address System through an isolation device to preserve the independence of the two systems. This connection allows telephone system communications over the paging channel of the PA system as described below. The PABX system is also connected to the commercial telephone system and the Duke microwave/Fiber Optic Network.

Specific commitments related to the operation and testing of fire protection system equipment are contained in FSAR Chapter 16.0.

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- d. Industrial health, safety and first aid
- e. Emergency plan and procedures
- f. Station security program and procedures
- g. Fire protection plan and procedures
- h. Using procedures and performing independent verification
- New Employee Orientation (Portions of other General Employee Training may be included.)

Continuing training is conducted in these areas as is necessary to maintain employee proficiency.

13.2.2.1.1 Fire Brigade Training

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The primary purpose of the Fire Brigade Training Program is to develop a group of station employees skilled in fire prevention, fire fighting techniques, first aid procedures, and emergency response. They are trained and equipped to function as a team for the fighting of fires. The station fire brigade organization is intended to be self sufficient with respect to fire fighting activities.

The Fire Brigade Training program provides for initial training of all new fire brigade members, quarterly classroom training and drills, annual practical training, and leadership training for fire brigade leaders.

Training is discussed in Duke Power Company, Catawba Nuclear Station, response to Appendix A, BTP APCSB 9.5-1.

13.2.2.2 Technical Training

Technical Training is designed, developed and implemented to assist station employees in gaining an understanding of applicable fundamentals, procedures, and practices; and in developing manipulative skills necessary to perform assigned work in a competent manner. Technical training consists of three segments:

> Initial Training On-the-Job Training & Qualifications Continuing Training

13.2.2.2.1 Initial Job Training

Initial job training is designed to provide knowledge of the fundamentals, basic principals, and procedures involved in work in which an employee is assigned.

R Specific commitments related to the Fire Brigade are contained in FSAR Chapter 16.0.

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Catawba Nuclear Station Directive, "Control of Selected Licensee Commitments"

16.0-1

16.2 APPLICABILITY

This section provides the general requirements applicable to each of the commitments and Testing Requirements within Section 16.0, Selected Licensee Commitments (SLCs).

16.2.1 Compliance with the SLCs is required as specified. When a Commitment is not met, the associated Remedial Action(s) shall be met.

16.2.2 Noncompliance with a Commitment exists when the requirements of both the Commitment and the specified Remedial Action are not met within the specified time. If compliance with a Commitment is restored prior to expiration of the specified time interval completion of the Remedial Action(s) is not required.

16.2.3 Where corrective measures are completed that permit operation under the Remedial Actions, the action may be taken within the specified time limits, as measured from the time of failure to most the Commitment.

16.2.4 Entry into an OPERATIONAL MODE or other specified applicability condition must be made with 1) all required systems, equipment or components OPERABLE, and all other parameters specified in Commitments Met. Credit may not be taken for deviations and out-of-service provisions contained in Remedial Actions.

Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the conditions for the Commitments are met without reliance on provisions contained in the Remedial Actions. This provision shall not prevent passage through OPERATIONAL MODES as required to comply with Remedial Actions. Exceptions to these requirements are stated in the individual specifications.

16.2.5 Commitments including the associated Remedial Actions shall apply to each unit individually unless otherwise indicated as follows:

- a. Whenever the Commitment refers to systems or components which are shared by both units, the Remedial Actions will apply to both units simultaneously. This will be indicated in the Remedial Actions;
- b. Whenever the Commitment applies to only one unit, this will be identified in the APPLICABILITY section of the Commitment; and
- c. Whenever certain portions of a Commitment contain operating parameters, setpoints etc., which are different for each unit, this will be identified in parentheses or footnotes. (for example, "...flow rate of 54,000 cfm (Unit 1) or 43,000 cfm (Unit 2)...").

16.2.6 Testing Procedures shall be performed during the OPERATIONAL MODES or other conditions specified for an individual commitment unless otherwise stated in an individual Testing Procedure or Reference.

16.2.7 Each Testing Procedure shall be performed on its specified frequency with a maximum allowable extension not to exceed 50% of the test frequency. The phrase "at least" associated with a testing frequency does not negate this tolerance value, and permits the performance of more frequent surveillance

activities. This tolerance is necessary to provide operational flexibility because of scheduling and performance considerations.

16.2.8 Under this criteria, equipment, systems or components are assumed to be OPERABLE if the associated testing procedures have been satisfactorily performed within the specified test frequency. Nothing is this provision is to be construed as defining equipment, systems or components OPERABLE, when such items are found or known to be inoperable although still meeting the testing requirements.

Failure to perform a Testing Procedure within the specified frequency shall constitute a failure to meet the OPERABILITY requirements for a commitment. Exceptions to these requirements are stated in the individual commitments. Testing Procedures do not have to be performed on inoperable equipment.

16.2.9 During initial plant startup or following extended plant outages, the applicable testing activities must be performed within the stated test frequency prior to placing or returning the system or equipment into OPERABLE status.

Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Testing Procedure(s) associated with the Commitment have been performed within the specified frequency.

16.2.10 Testing Procedures for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10CFR 50, Section 50.55a(g)(6)(1);
- b. Testing Frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice inspection and testing activities	Required frequencies for performing inservice inspection and testing activities						
Weekly	At least once per 7 days						
Monthly	At least once per 31 days						
Quarterly or every 3 months	At least once per 92 days						
Semiannually or every 6 months	At least once per 184 days						
Every 9 months	At least once per 276 days						
Yearly or annually	At least once per 366 days						

16.2-2

- c. The provisions of Section 16.2.7 are applicable to the above required frequencies for performing inservice inspection and testing activities;
- d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Testing Procedures; and
- e. The ASME Boiler and Pressure Vessel Code supersedes the requirements of any commitment unless an exception to the Code has been approved.

16.2.11 Testing Procedures shall apply to each unit individually unless otherwise indicated as stated in Section 16.2.5 for individual commitments or whenever certain portions of a specification contain testing parameters different for each unit, which will be identified in parentheses or footnotes.

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16.9 AUXILIARY SYSTEMS

FIRE PROTECTION SYSTEMS

16.9-1 FIRE SUPPRESSION WATER SYSTEM

COMMITMENT

The Fire Suppression Water System shall be OPERABLE with:

- a. At least two fire suppression pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header, and
- b. An OPERABLE flow path capable of taking suction from Lake Wylie and transferring the water through distribution piping with OPERABLE sectionalizing control valves and isolation valves for each sprinkler, hose standpipe, or Spray System riser required to be OPERABLE per Commitments 16.9-2 and 16.9-4.

APPLICABILITY:

At all times.

REMEDIAL ACTION:

- a. With one of the above required pumps and/or one Water Supply/Distribution System inoperable, restore the inoperable equipment to OPERABLE status within 7 days or provide an alternate backup pump or supply.
- b. With the Fire Suppression Water System otherwise inoperable establish a backup Fire Suppression Water System within 24 hours.

TESTING REQUIREMENTS:

- a. The Fire Suppression Water System shall be demonstrated OPERABLE:
 - At least once per 31 days on a STAGGERED TEST BASIS by starting each electric motor-driven pump and operating it for at least 15 minutes on recirculation flow.
 - ii. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path which is accessible during plant operations is in its correct position.
 - iii. At least once per 6 months by performance of a system flush of the outside distribution loop to verify no flow blockage by fully opening the hydraulically most remote hydrant.
 - iv. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel,

- v. At least once per 18 months by verifying that each valve (manual, power-operated, or automatic) in the flow path which is inaccessible during plant operations is in its correct position,
- vii. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
 - Verifying that each automatic valve in the flow path actuates to its correct position.
 - Verifying that each pump develops at least 2500 gpm at a net pressure of 144 psig by testing at three points on the pump performance curve,
 - Cycling each value in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
 - 4) Verifying that each fire suppression pump starts within 10 psig of its intended starting pressure (A pump, primary switch-95 psig; B pump, primary switch-90 psig; and C pump, primary switch-85 psig).
- viii. At least once per 3 years by performing a flow test of the system in accordance with Chapter 8, Section 16 of the Fire Protection Handbook, 15th Edition, published by the National Fire Protection Association.

REFERENCES :

Sectors in

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 2, Section 9.5.1
- 4) Catawba SER, Supplement 3, Section 9.5.1
- 5) Catawba Fire Protection Review, as revised
- 6) Catawba Fire Protection Commitment Index
- 7) Startup and Normal Operation of Fire Protection System OP/1/A/6400/02A

BASES:

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO_2 , and fire hose stations. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to

safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

In the event the Fire Suppression Water System becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

This selected licensee commitment is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License Conditions #6 for NPF-52 and #8 for NPF-35.

16.9 AUXILIARY SYSTEMS

FIRE PROTECTION SYSTEMS

16.9-2 SPRAY AND/OR SPRINKLER SYSTEMS

COMMITMENT

Spray and/or Sprinkler systems in Table 16.9-1 shall be OPERABLE:

APPLICABILITY:

Whenever equipment protected by the Spray/Sprinkler System is required to be OPERABLE.

REMEDIAL ACTION:

With one or more of the above required Spray and/or Sprinkler Systems inoperable, within 1 hour establish a continuous fire watch with backup fire surpression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol.

TESTING REQUIREMENTS:

- a. Each of the above required Spray and/or Sprinkler Systems shall be demonstrated OPERABLE:
 - i. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path which is accessible during plant operations is in its correct position.
 - ii. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
 - iii. At least once per 18 months by verifying that each valve (manual, power-operated, or automatic) in the flow path which is inaccessible during plant operations is in its correct position, and
 - iv. At least once per 18 months:
 - By performing a system functional test which includes simulated automatic actuation of the system, and cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
 - By a visual inspection of each Sprinkler System starting at the system isolation valve to verify the system's integrity; and
 - By a visual inspection of each nozzle's spray area to verify the spray pattern is not obstructed.

REFERENCES:

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 2, Section 9.5.1
- 4) Catawba SER, Supplement 3, Section 9.5.1
- 5) Catawba SER, Supplement 5, Section 9.5.1
- 6) Catawba Fire Protection Review, as revised
- 7) Catawba Fire Protection Commitment Index

BASES:

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO_2 , and fire hose stations. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

This selected licensee commitment is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License Conditions #6 for NPF-52 and #8 for NPF-35.

Table 16.9-1 Spray and Sprinkler Systems

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a.	Elevation 522 + 0 ft - Auxiliary Building					
	Room No.	Equipment				
	100 101 104 105 106 109 110 111 112	RHR & Containment Spray Sump Pump Area Corridor RHR Pump 1B RHR Pump 1A Corridor RHR Pump 2B RHR Pump 2A Corridor Corridor				
ь.	Elevation 543 + 0 ft - Auxiliary	Building				
	230 231 240 241 250 260	Cent. Chg. Pump 1A Cent. Chg. Pump 1B Cent. Chg. Pump 2A Cent. Chg. Pump 2B Unit 1 Aux. Feedwater Pump Room Unit 2 Aux. Feedwater Pump Room				
c.	Elevation 554 + 0 ft - Auxiliary	Building				
	340 350	Battery Room Corridor (DD-EE) Battery Room Corridor (DD-EE)				
d.	Elevation 560 + 0 ft - Auxiliary	Building				
	300	Component Cooling Pumps 1A1, 1A2, 1B1 & 1B2				
е.	Elevation 574 + 0 ft - Auxiliary	Building				
	480 490	Cable Room Corridor (DD-EE) Cable Room Corridor (DD-EE)				
f.	Elevation 577 + 0 ft - Auxiliary	Building				
	400	Component Cooling Pumps 2A1, 2A2, 2B1 & 2B2				
g.	Reactor Buildings - -	Annulus Pipe Corridor				

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16.9 AUXILIARY SYSTEMS

FIRE PROTECTION SYSTEMS

16.9-3 CO, SYSTEMS

COMMITMENT

The following High Pressure and Low Pressure CO, Systems shall be OPERABLE:

- a. Low Pressure CO2 System Diesel generator rooms, and
- b. High Pressure CO2 System Auxiliary feedwater pump rooms.

APPLICABILITY:

Whenever equipment protected by the CO2 Systems is required to be OPERABLE.

REMEDIAL ACTION:

With one or more of the above required CO_2 Systems inoperable, within 1 hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components could be damaged; for other areas, establish an hourly fire watch patrol.

TESTING REQUIREMENTS:

- a. Each of the above required CO₂ Systems shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve (manual, power operated, or automatic) in the flow path is in its correct position.
- b. Each of the above required Low Pressure O_2 Systems shall be demonstrated OPERABLE:
 - 1. At least once per 7 days by verifying the CO_2 storage tank level to be greater than 44% of full capacity, and
 - ii. At least once per 18 months by verifying:
 - Each system actuates manually and automatically, upon receipt of a simulated actuation signal,
 - Damper closure devices receive an actuation signal upon system operation, and
 - By a visual inspection of discharge nozzles to assure no blockage.

- c. Each of the above required High Pressure CO₂ Systems shall be demonstrated OPERABLE:
 - i. At least once per 6 months by verifying the weight of each CO_2 storage cylinder to be at least 90% of full charge weight, and
 - ii. At least once per 18 months by:
 - Verifying each system actuates manually and automatically upon receipt of a simulated actuation signal.
 - Verifying that damper closure devices receive an actuation signal upon system operation, and
 - A visual inspection of the discharge nozzles to assure no blockage.

REFERENCES:

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 3, Section 9.5.1

BASES:

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO_2 , and fire hose stations. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

This selected licensee commitment is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License Conditions #6 for NPF-52 and #8 for NPF-35.

16.9 AUXILIARY SYSTEMS

FIRE PROTECTION SYSTEMS

16.9-4 FIRE HOSE STATIONS

COMMITMENT

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The fire hose stations given in Table 16.9-2 shall be OPERABLE:

APPLICABILITY:

Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

REMEDIAL ACTION:

With one or more of the fire hose stations given in Table 16.9-2 inoperable, provide gated wye(s) on the nearest OPERABLE hose station(s). One outlet of the wye shall be connected to the standard length of hose provided for the hose station. The second outlet of the wye shall be connected to a length of hose sufficient to provide coverage for the area left unprotected by the inoperable hose station. Where it can be demonstrated that the physical routing of the fire hose would result in a recognizable hazard to station personnel, plant equipment, or the hose itself, the fire hose shall be stored in a roll at the outlet of the OPERABLE hose station. Signs shall be mounted above the gated wye(s) to identify the proper hose to use. The above REMEDIAL ACTION requirement shall be accomplished within 1 hour if the inoperable fire hose is the primary means of fire suppression; otherwise route the additional hose within 24 hours.

TESTING REQUIREMENTS:

- a. Each of the fire hose stations given in Table 16.9-2 shall be demonstrated OPERABLE:
 - i. At least once per 31 days, by a visual inspection of the fire hose stations accessible during plant operations to assure all required equipment is at the station,
 - ii. At least once per 18 months, by:
 - Visual inspection of the stations not accessible during plant operations to assure all required equipment is at the station.
 - 2) Removing the hose for inspection and reracking, and
 - Inspecting all gaskets and replacing any degraded gaskets in the couplings.

- iii. At least once per 3 years, by:
 - 1) Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage, and
 - Conducting a hose hydrostatic test at a pressure of 200 psig or at least 50 psig above maximum fire main operating pressure, whichever is greater.

REFERENCES :

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 3, Section 9.5.1
- 4) Catawba Fire Protection Review, as revised
- 5) Catawba Fire Protection Commitment Index

BASES:

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO_2 , and fire hose stations. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

This selected licensee commitment is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License Conditions #6 for NPF-52 and #8 for NPF-35.

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FIRE HOSE STATIONS

LOCATION	ELEVATION	HOSE RACK #
1. Auxiliary Building		
59, FF	522+0	18F235
55, FF	522+0	18F248
63-64, KK	543+0	18F210
63, MM	543+0	1PE211
60, MM	543+0	10F212
58, PP	543+0	105210
59. GG-HH	543+0	105226
60-61, FF-GG	543+0	105237
63, CC	543+0	105230
57. JJ	543+0	105242
54-55, GG	543+0	105240
57. FF	543+0	105250
52-53. GG	543+0	105255
51. CC	543+0	105256
50-51. JJ-KK	543+0	105262
53. MM	543+0	105260
50-51. NN	543+0	105271
62. MM-NN	560+0	105202
63. JJ-KK	560+0	105212
58, PP	560+0	105210
56. NN	560+0	105220
59, HH	560+0	105220
57. KK	560+0	105242
54-55, FF-GG	560+0	105251
51. KK	560+0	105262
52. MM-NN	560+0	105260
58, BB	554+0	105404
65, BB-CC	560+0	105405
62. AA-BB	560+0	105405
56, BB	554+0	105497
52. AA-BB	560+0	105499
49, BB-CC	560+0	105489
68-69, DB	560+0	105996
45-46, BB	560+0	105007
63. NN	577+0	18F204
61. LL	577+0	105214
63. KK-LL	577+0	105215
58, PP	577+0	105221
59. JJ	577+0	195230
58, GG	577+0	105240
56, KK	577+0	105244
54, GG	577+0	105252
52-53, KK	577+0	105250
51, KK	577+0	105264
51-52. NN	577+0	105272
	511.0	1872/2

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FIRE HOSE STATIONS

LOCATION	ELEVATION	HOSE RACK		
56, PP	577+0	1RF278		
68-69, BB	577+0	18F478		
65, BB-CC	577+0	1RF479		
59, DD	574+0	185480		
60, AA	574+0	105481		
49, BB-CC	577+0	105400		
45, BB	577+0	105401		
55, DD	574+0	105402		
54. AA	574+0	105402		
63. AA	577+0	185493		
51. AA	577+0	185993		
62. NN	594+0	IRF998		
57 MM	594+0	185205		
63 .11	594+0	1RF222		
57 44	594+0	1RF231		
57 FF	594+0	1RF245		
51 11	594+0	1RF253		
52 NN	594+0	1RF259		
64 DD	594+0	1RF275		
04, DD	594+0	1RF984		
50, 88	594+0	1RF985		
51, KK	605+10	1RF265		
63, 00	605+10	1RF233		
63-64, MM	631+6	1RF483		
50-51, MM	631+6	1RF495		
Fuel Pools				
65. TT-UU	605+10	125208		
48. TT-UU	605+10	18E276		
63-64, MM	605+10	105482		
50-51, MM	605+10	1RF822		
Nuclear Service Water P	ump Structure			
East Section	600+0	185939		
West Section	600+0	185940		
		147 240		

16.9 AUXILIARY SYSTEMS

FIRE PROTECTION SYSTEMS

16.9-5 FIRE BARRIER PENETRATIONS

COMMITMENT

All fire barrier penetrations (walls, floor/coilings, cable tray enclosures and other fire barriers) separating safety-related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable, piping, and ventilation duct penetration seals) shall be OPERABLE.

APPLICABILITY:

At all times.

REMEDIAL ACTION:

With one or more of the above required fire barrier penetrations and/or sealing devices inoperable, within 1 hour either establish a continuous fire watch on at least one side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one side of the inoperable penetration and establish an hourly fire watch patrol.

TESTING REQUIREMENTS:

- a. At least once per 18 months the above required fire barrier penetrations and sealing devices shall be verified OPERABLE by performing a visual inspection of:
 - i. The exposed surfaces of each fire rated assembly;
 - ii. At least 10% of all fire dampers. If apparent changes in appearance or abnormal degradation are found, a visual inspection of an additional 10% of the dampers shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each fire damper will be inspected every 15 years; and
 - iii. At least 10% of each type of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10% of each type of sealed penetration shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found. Samples shall be selected such that each penetration seal will be inspected every 15 years.

- b. Each of the above required fire doors shall be verified OPERABLE by inspecting the closing mechanism and latches at least once per 6 months, and by verifying:
 - i. The position of each interior closed fire door at least once per 24 hours,
 - ii. The OPERABILITY of the fire door supervision system for each electrically supervised fire door by performing a TRIP ACTUATING DEVICE OPERATIONAL TEST at least once per 31 days, and
 - That each locked closed fire door is closed at least once per 7 days.

REFERENCES:

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 3, Section 9.5.1
- 4) Catawba Fire Protection Review, as revised
- 5) Catawba Fire Protection Commitment Index

BASES:

The functional integrity of the fire barrier penetrations ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. These design features minimize the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishing of the fire. The fire barrier penetrations are a passive element in the facility fire protection program and are subject to periodic inspections.

Fire barrier penetrations, including cable penetration barriers, fire doors, fire dampers, and other fire barriers are considered functional when the visually observed condition is the same as the as-designed condition. For those fire barrier penetrations that are not in the as-designed condition, an evaluation shall be performed to show that the modification has not degraded the fire rating of the fire barrier penetration.

During periods of time when a barrier is not functional, either: (1) a continuous fire watch is required to be maintained in the vicinity of the affected barrier, or (2) the fire detectors on at least one side of the affected barrier must be verified OPERABLE and an hourly fire watch patrol established, until the barrier is restored to functional status.

This selected licensee commitment is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License conditions #8 for NPF-35.

16.9 AUXILIARY SYSTEMS

FIRE PROTECTION SYSTEMS

16.9-6 FIRE DETECTION INSTRUMENTATION

COMMITMENT

As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 16.9-3 shall be OPERABLE.

APPLICABILITY:

Whenever equipment protected by the fire detection instrument is required to be OPERABLE.

REMEDIAL ACTION:

- a. With any, but not more than one-half the total in any fire zone, Function A fire detection instruments shown in Table 16.9-3 inoperable, restore the inoperable instrument(s) to OPERABLE status within 14 days or within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.
- b. With more than one-half of the Function A fire detection instruments in any fire zone shown in Table 16.9-3 inoperable, or with any Function B fire detection instruments shown in Table 16.9-3 inoperable, or with any two or more adjacent fire detection instruments shown in Table 16.9-3 inoperable, within 1 hour establish a fire watch patrol to inspect the sone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect that containment zone at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5.

TESTING REQUIREMENTS:

a. Each of the above required smoke detection or flame detection instruments which are accessible during plant operation shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months. Each of the above required heat detection instruments shall be demonstrated OPERABLE as follows:

- 1. For nonrestorable spot-type detectors, at least two detectors out of every hundred, or fraction thereof, shall be removed every 5 years and functionally tested. For each failure that occurs on the detectors removed, two additional detectors shall be removed and tested; and
- 11. For restorable spot-type heat detectors, at least one detector on each signal initiating circuit shall be demonstrated OPERABLE at least once per 6 months by performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST. Different detectors shall be selected for each test. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by the performance of a TRIP ACTUATING DEVICE OPERATIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed in the previous 6 months.
- b. The NFPA Standard 72D supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

REFERENCES:

- 1) Catawba FSAR, Section 9.5.1
- 2) Catawba SER, Section 9.5.1
- 3) Catawba SER, Supplement 2, Section 9.5.1
- 4) Catawba SER, Supplement 3, Section 9.5.1
- 5) Catawba Fire Protection Review, as Revised
- 6) Catawba Fire Protection Commitment Index

BASES:

The OPERABILITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The Fire Suppression System consists of the water system, spray, and/or sprinklers, CO_2 , and fire hose stations. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility Fire Protection Program.

In the event that portions of the Fire Suppression Systems are inoperable, alternate backup fire-fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression. This selected licensee commitment is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License Conditions #6 for NPF-52 and #8 for NPF-35.

TABLE 16.9-3, Page 1 of 5

FIRE DETECTION INSTRUMENTS

FIRE				MINIMUM INSTRUMENTS OPERABLE*				-
ZONE DESCRIPTION		LOC	CATION	SMOKE	FLAME	HEAT	FUNCTION**	
1	R.H.R. Pump 1B	6G-53	F1 522 + 0	1	0	1		
2	R.H.R. Pump 1A	FF-53	F1.522 + 0		n	i		
3	Cont. Spray Pump 1B	GG-54	F1.522 + 0	i	ñ	3		
4	Cont. Spray Pump 1A	GG-55	F1.522 + 0	2	n	2		
5	R.H.R. Pump 2B	GG-61	F1.522 + 0	i	ñ	ī		
6	F.H.R. Pump 2A	FF-61	F1 522 + 11	1	ñ	;		
7	Cont. Spray Pump 28	GG-60	F1 522 + 0	ż	ñ	2		
8	Cont. Spray Pump 2A	GG-59	F1 522 + D	2	ñ	2	-	
9	Aux. F. W. Pumps	BB-51	F1 543 + 0	14	n	12(6)	A(R)	
10	Mech. Pene. Room	JJ-52	F1 543 + 0	3	ñ	3	A(0)	
11	Corridor/Cables	NN-51	F1 543 + 0	ĥ	ñ	6		
12	Recip. Chg. Pump	JJ-53	F1 543 + 0	1	n	1		
13	Safety Inj Pump 1B	HH-53	F1 543 + 0	i	0	i	-	
14	Safety Inj Pump 1A	66-53	F1 543 + 0	;	0	;		
15	Cent. Chg. Pump 1B	1.1-54	F1 543 + 0	2	0	2		
16	Cent. Chg. Pump 1A	11-55	F1 543 + 0	2	0	2		
17	Aisles/Cables	KK-56	F1 543 + 0	18	n	18	â	
18	Aisles/Cables	FF-55	F1 543 + 0	6	n	6	Â	
19	AFW Pumps (Unit 2)	BB-63	F1 543 + 0	14	0	12(6)	A(P)	
20	Mech. Pene. Room	.1.1-62	F1 543 + 0	14	0	3	A(b)	
21	Aisles/Cables	NN-61	F1 543 + 0	6	ů	6		
22	Recip Chg. Pump	JJ-60	F1 543 + 0	1	0	1	ĩ	
23	Safety Inj. Pump 2B	HH-60	F1 543 + 0	1	n	1	Â	
24	Safety Inj. Pump 2A	GG-60	F1 543 + 0	i	õ	1		
25	Cent. Chg. Pump 2B	JJ-59	F1 543 + 0	2	n	2	Â	
26	Cent. Chg. Pump 2A	11-58	F1 543 + 0	2	ő	2		
27	Aisles/Cables	KK-59	F1 543 + 0	20	Ő	20		
28	Aisles/Cables	FF-58	F1 543 + 0	6	0	6	-	
29	SW Gear Equip. Room	AA-50	F1 560 + 0	7	0	0	-	
30	Elect. Pene, Room	CC-50	F1 560 + 0	Ŕ	0	0	-	
31	Corridor/Cables	FF-53	F1 560 + 0	5	0	5		
32	Corridor/Cables	KK-52	F1 560 + 0	9	0	9		
33	Corridor/Cables	NN-54	E1 560 + 0	10	0	10	2	
34	Aisles/Cables	.11-56	F1 560 + 0	10	0	10		
35	Motor Control Centers	66-56	F1 560 + 0	14	0	2		
36	Cable Tray Access	FF-56	E1.568 + 0	2	0	2	Â	

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FIRE DETECTION INSTRUMENTS

FIRE			MINIMUM INSTRUMENTS OPERABLE*				120	
ZONE DESCRIPTION		LO	CATION	SMOKE	FLAME	HEAT	FUNCTION**	
37	Equip. Batteries	DD-55	F1 554 + 0	5	0			
38	Equip. Batteries	CC-55	F1 554 + 0	5	0			
39	Battery Room	CC-56	F1 554 + 0	17	0	0		
41	SW Gear Equip. Room	AA-64	F1 560 + 0	17	0	0		
42	Elect. Pene. Room	CC-65	F1.560 + 0	8	0	0	2	
43	Corridor/Cables	FF-61	F1.560 + 0	5	C	5	2	
44	Aisles/Cables	KK-63	F1 560 + 0	R	0	9	-	
45	Aisles/Cables	NN-60	F1.560 + 0	13	0	12		
46	Aisles/Cables	HH-59	F1 560 + 0	13	0	13	2	
47	Motor Control Center	GG-58	F1 560 + 0	13	0	15		
48	Cable Tray Access	FF-58	F1 560 + 0	2	0	2		
49	Equip. Batteries	DD-60	F1 560 + 0	r F	0	-	· ·	
50	Equip. Batteries	CC-60	F1 560 + 0	5	0	;	· · · · · · · · · · · · · · · · · · ·	
51	Battery Room	CC-59	F1 560 + 0	17	0		-	
53	SW Gear Equip. Room	AA-49	F1 577 + 0	1/	0	0	:	
54	Aisles/Cables	CC-50	F1 577 + 0	10	0	0		
55	Aisles/Cables	NN-52	F1 577 + 0	10	0	0	•	
56	Aisles/Cables	PP-55	F1 577 + 0	13	0	12		
57	Aisles/Cables	11-55	F1 577 + 0	13	0	13	2	
58	Aisles/Cables	HH-55	F1 577 + 0	21	0	11	A	
59	Motor Control Center	FF-54	F1 577 + 0	21	0	21	A	
60	Cable Room	11-56	F1 574 + 0	10	0	10	^	
62	SW Gear Equip. Room	AA-64	F1 577 + 0	10	0	15	A	
63	Elect. Pene. Room	64-77	F1 577 + 0	10	0	0	A.	
64	Aisles/Cables	PP-62	F1 577 + 0	10	0	0		
65	Aisles/Cables	PP-59	F1 577 + 0	16	0		A	
66	Aisles/Cables	11-59	F1 577 + 0	10	0	16	A	
67	Aisles/Cables	HH-59	E1 577 + 0	21	0	11	•	
68	Motor Control Center	FF-60	E1 577 + 0	21	0	21	A.	
69	Cable Room	rr-50	E1 577 + 0	10	0	1	^	
71	Elect Pene, Room	CC-51	F1 504 + 0	10	0	15	A .	
72	Control Room	CC-56	E1 504 + 0	10	0	0	A.	
73	Vent. Equip. Room	FF-56	E1 504 + 0	23	0	6	A	
74	Aisles/Cables	11-56	E1 504 + 0	9	0	0	A	
76	Aisles/Cables	DD-SA	E1 504 + 0	25	0	25	Α.	
79	Elect, Pene, Room	BB-63	E1 504 + 0	15	0	15	A	
		00-03	21.394 + 0	11	0	0	A	

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FIRE DETECTION INSTRUMENTS

FIRE				MINIMUM INS	TRUMENTS	OPERABLE*	
ZONE DESCRIPTION		LOCATION		SMOKE	FLAME	HEAT	FUNCTION**
80	Control Room	BB-59	F1.594 + 0	22	0	6	A
81	Ven, Equip, Room	FF-58	E1.594 + 0	12	0	0	A
82	Aisles/Cables	KK-58	E1.594 + 0	27	0	28	A
84	Aisles/Cables	NN-58	E1.594 + 0	17	0	17	A
89	Fuel Pool Area #1	PP-50	E1.605 + 10	19	7	19	A
90	Fuel Pool Area (Unit 2)	PP-64	E1.605 + 10	19	7	10	A
128	UH! Bldg.	HH-44	E1.550 + 0	2	3	2	A
129	Fuel Pool Purge Room (Unit 1)	NN-50	E1.631 + 6	6	0	6	A
130	UHI Bldg. (Unit 2)	HH-71	E1.594 + 0	2	3	2	A
131	Reactor Bldg.	0°-45°	Bel. E1.565 + 3	4	0	0	A
132	Reactor Bldg.	45°-90°	Bel. El.565 + 3	3	0	0	A
133	Reactor Bldg.	90°-135°	Bel. E1.565 + 3	4	0	0	A
134	Reactor Bldg.	135°-180°	Bel. E1.565 + 3	5	0	0	A
135	Reactor Bldg.	180°-225°	Bel. El.565 + 3	4	C	0	A
136	Reactor Bldg.	270°-315°	Bel. E1.565 + 3	3	0	0	A
137	Reactor Bldg.	315°-0°	Bel. E1.565 + 3	8	0	0	٨
138	Reactor Bldg.	0°-45°	Bel. El.586 + 3	6	0	0	A
139	Reactor Bldg.	45°-90°	Bel. El.586 + 3	4	0	0	A
140	Reactor Bldg.	90°-135°	Bel. E1.565 + 3	3	0	0	A
141	Reactor Bidg.	135°-180°	Bel. E1.586 + 3	8	0	0	A
142	Reactor Bldg.	180°-225°	Bel. E1.586 + 3	5	0	0	A
143	Reactor Bldg.	315°-0°	Bel. E1.586 + 3	5	0	0	A
144	Reactor Bldg.	0°-45°	Bel. E1.593 + 21	5 14	0	0	A
145	Reactor Bldg.	45°-90°	Bel. E1.593 + 21	17	0	0	A
146	Reactor Bldg.	90°-135°	Bel. E1.593 + 2	11	0	0	4
147	Reactor Bldg.	135°-180°	Bel. E1.593 + 2	10	0	0	A
148	Reactor Bldg.	180°-225°	Bel. E1.593 + 2	2	0	0	A
149	Reactor Bldg.	315°-0°	Bel. E1.593 + 2	7	0	0	A
150	Reactor Bldg. (Unit 2)	0°-45°	Bel. El. 565 + 3	4	0	0	A
151	Reactor Bldg. (Unit 2)	45°-90°	Bel. E1.565 + 3	3	0	0	A
152	Reactor Bldg. (Unit 2)	90°-135°	Bel. El.565 + 3	4	0	0	A
153	Reactor Bldg. (Unit 2)	135°-180°	Bel. El. 565 + 3	5	0	0	A
154	Reactor Bldg. (Unit 2)	180°-225°	Bel. El. 565 + 3	3	Ő	0	A
155	Reactor Bldg. (Unit 2)	270°-315°	Bel. El 565 + 3	4	Ô	Ő	A
156	Reactor Bldg. (Unit 2)	315°-0°	Bel. E1.565 + 3	6	0	0	A
157	Reactor Bldg. (Unit 2)	0°-45°	6e1. E1.586 + 6	6	0	0	A

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FIRE DETECTION INSTRUMENTS

FIRE				MINIMUM INSTRUMENTS OPERARIE*			•			
ZONE	DESCRIPTION	LOC	ATION	SMOKE	FLAME	HEAT	FUNCTION**			
158	Reactor Bldg. (Unit 2)	45°-90°	Re1 F1 586 + 6		0	0				
159	Reactor Bldg. (Unit 2)	90°-135°	Bel F1 586 + 6	3	â	0				
160	Reactor Bldg. (Unit 2)	135°-180°	Bel. Fl 586 + 6	8	ñ	0				
161	Reactor Bldg. (Unit 2)	180°-225°	Bel. F1 586 + 6	5	ñ	ñ				
162	Reactor Bldg. (Unit 2)	315°-0°	Bel F1 586 + 6	š	ñ	n	.			
163	Reactor Bldg. (Unit 2)	0°-45°	Bel F1 593 + 21	13	n	ő	Â			
164	Reactor Bldg. (Unit 2)	45°-90°	Bel F1 593 + 21	17	ñ	0	â			
165	Reactor Bldg. (Unit 2)	90°-135°	Bel. F1 593 + 21	13	0	n	Â			
166	Reactor Bldg. (Unit 2)	135°-180°	Bel. Fl 593 + 21	10	ñ	n	Â			
167	Reactor Bldg. (Unit 2)	180°-225°	Bel F1 593 + 21	2	n	0	Â			
168	Reactor Bldg. (Unit 2)	3150-00	Bel. Fl 593 + 21	. 7	0	0	ĩ			
169	RCP-1A	Reactor Bldg.	E1.593 + 2%	0	0 0	1	Â			
170	RCP-1B	Reactor Bldg.	F1 593 + 2%	ñ	ñ	:	â			
171	RCP-1C	Reactor Bldg.	F1.593 + 24	ñ	0	1	Â			
172	RCP-1D	Reactor Bldg	F1 593 + 24	0	0	1	-			
173	RCP-2A	45°	Bel F1 593 + 21	0	0	1	-			
174	RCP-2B	135°	Bel F1 593 + 21	0	0	i	Â			
175	RCP-2C	225°	Bel. F1 593 + 21	n	ñ	;				
176	RCP-2D	315°	Bel El 593 + 21	n	0	i	2			
177	Filter Bed Unit 18	Reactor Bldg.	Bel. F1 565 + 3	2	0	2				
178	Filter Bed Unit 1A	Reactor Bldg.	Bel. F1.565 + 3	2	n	2				
179	Filter Bed Unit 2A	Reactor Bldg.	E1.565 + 3	2	n	2				
180	Filter Bed Unit 2B	Reactor Bldg.	E1.565 + 3	2	n	2				
181a	Annulus		E1.561 + 0	ñ	n	1	· · · · · · · · · · · · · · · · · · ·			
181b	Annulus		F1.583 + 0	ñ	n	i	î			
181c	Annulus		F1.604 + 0	ñ	ñ	1				
181d	Annulus		F1.629 + 5	ñ	G	;				
181e	Annulus		E1.649 + 5	ñ	ñ	1	2			
181f	Annulus		E1.664 + 0	n	n	i	2			
182a	Annulus		F1.561 + 0	ñ	ñ	1	2			
182b	Annulus		E1 583 + 0	n	n	1	2			
182c	Annulus		E1.604 + 0	n	ñ	1	Â			
182d	Annulus		F1 629 + 5	n	0	;	-			
182e	Annulus		E1.649 + 5	0	0	i	â			
182f	Annulus		E1.664 + 0	0	0	i	Å			
183	Fuel Pool Purge Room (Unit 2)	NN-64	E1.631 + 6	6	0	6	Â			

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FIRE DETECTION INSTRUMENTS

FIRE		MINIMUM INSTRUMENTS OPERARLE*					
ZONE DESCRIPTION		LOCATION	SMOKE	FLAME	HEAT	FUNCTION**	
212	Aisles/Cables	GG-57 F1.522 + 0	2	0	2		
213	Aux. Batt. Room	AA-55 E1.544 + 0	à	ñ	Ă		
214	Aux. Cont. Pwr. Batt.	AA-59 E1.560 + 0	Å	ñ	4		
215	D/G Corridor	BB-45 E1.556 + 0	3	n	3	Å	
216	D/G Corridor	AA-45 E1.556 + 0	2	ñ	2	Å	
217	D/G Corridor	CC-71 E1.560 + 0	3	č	2	A	
218	D/G Corridor	BB-71 E1.560 + 0	2	ñ	2	4	
219	Mech. Pen. Room	HH-52 E1.577 + 0	6	Ő	6	4	
220	Mech. Pen. Room	JJ-62 E1 577 + 0	6	ñ	6		
222	Airlock Access	JJ-51 E1.605 + 10) í	ñ	ĩ	Â	
224	Airlock Access (Unit 2)	JJ-63 E1.605 + 10	i i	Ő	î	Å	
225	RN Pump Structure	West Section E1.600 + 0	8	0	8	Å	
226	RN Pump Structure	East Section E1.600 + 0	8	ñ	8	Å	
231	Reactor Bldg. (Unit 1)	260°-303° Bel. El. 668	3 + 10 10	ñ	ñ	Â	
232	Reactor Bldg. (Unit 2)	260°-303° Bel. F1.668	+ 10 10	ñ	ñ	Å	
184	HVAC Duct for Rooms 331 and 332	FF-53, 543 + 0	1(Duct)	Ő	ñ	i i	
185	HVAC Duct for Rooms 203, 205 205A, 206A, 206B, 207 and 209A	MM-60, 543 + 0	1(Duct)	Õ	õ	Â	
186	HVAC Duct for Rooms 301, 302, 305, and 307	NN-60, 560 + 0	1(Duct)	0	0	A	
RFIA	Diesel Generator 1A	EE-41, 556 + 0	0	0	0(10)	A(R)	
RF1B	Diesel Generator 1B	AA-41, 556 + 0	0	0	0(10)	A(R)	
RF2A	Diesel Generator 2A	EE-72, 556 + 0	0	n	0(10)	A(R)	
RF2B	Diesel Generator 2B	AA-72, 556 + 0	Õ	0	0(10)	A(B)	

*The fire detection instruments located within the containment are not required to be OPERABLE during the performance of Type A Containment Leakage Rate tests. **Function A: Early warning fire detection and notification only.

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Function B: Actuation of fire suppression system and early warning and notification.

16.13 CONDUCT OF OPERATIONS

OPERATORS

16.13-1 FIRE BRIDGADE

COMMITMENT

A site Fire Brigade of at least five members shall be maintained onsite at all times. The Fire Brigade shall not include three members of the minimum shift crew necessary for safety shutdown of the unit and any personnel required for other essential functions during a fire emergency.

APPLICABILITY:

At all times.

REMEDIAL ACTION:

With the Fire Brigade composition less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected atsence, take immediate action to fill the required positions.

TESTING PROCEDURES:

1) Operations Management Procedure 2-2

REFERENCES:

- 1) Catawba FSAR, Chapter 13.2
- 2) Catawba SER, Section 9.5.1 and Appendix D
- 3) Catawba Fire Protection Review, as revised
- 4) Catawba Fire Protection Commitment Index

BASES:

The primary purpose of the Fire Brigade Training Program is to develop a group of station employees skilled in fire prevention, fire fighting techniques, first aid procedures, and emergency response. They are trained and equipped to function as a team for the fighting of fires. The station fire brigade organization is intended to be self sufficient with respect to fire fighting activities.

The Fire Brigade Training program provides for initial training of all new fire brigade members, quarterly classroom training and drills, annual practical training, and leadership training for fire brigade leaders.

This selected licensee commitment is part of the Catawba Facility Operating License Conditions #6 for NPF-52 and #8 for NPF-35.

Attachment III

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Discussion, No Significant Hazards Analysis and

Evironmental Impact Statement

JUSTIFICATION FOR PROPOSED CHANGE

By letter dated April 24, 1986, NRC issued Ganeric Letter 86-10, "Implementation of Fire Protection Requirements." Guidance for implementation of this letter was provided on August 2, 1988 by Generic Letter 88-12, "Removal of Fire Protection Requirements from the Technical Specifications." This amendment request follows the guidance given in Generic Letter 88-12. Following implementation of this proposed change, a significant reduction in the content of the fire protection related Technical Specifications (TSs) will be achieved. Such action is consistent with the objectives of the NRC Technical Specification Improvement Program by reducing both the size and complexity of current Technical Specifications.

Attachments 2 and 3 provide proposed revisions to the Catawba TSs, Bases, and FSAR. The following is a brief summary of these changes:

- The Limiting Conditions for Operations (LCO) and Surveillance Requirements (SR) for Specification 3/4 3.3.8 - Fire Detection Instrumentation are removed from Technical Specifications.
- (2) The LCOs and SRs for Specification 3/4.7.10 Fire Suppression Systems Spray and/or Sprinkler Systems, CO₂ Systems and Fire Hose Stations are removed.
- (3) The LCOs and SRs for Specification 3/4.7.11 Fire Barrier Penetrations are removed.
- (4) Specification 6.2.2e on Unit Staff fire brigade requirements is removed.
- (5) Specification 6.5.1.12 requiring the inclusion of the Fire Protection Program under the items requiring technical review and control is added.
- (6) Specification 6.8.1h. requiring the inclusion of the Fire Protection Program under Procedures and Programs controls is added.
- (7) Specification 6.8.1i. requiring the inclusion of the Commitments contained in FSAR Chapter 16.0 under Procedures and Programs control is added.
- (8) Items in the Index and applicable Bases sections are removed.

This proposed amendment removes the fire protection systems, and fire brigade staffing requirements from the TSs and adds administrative controls to support the fire protection program. The requirements in the deleted TSs currently exist in plant procedures. This proposed amendment will subject future changes to these procedures to the added TS requirement on Administrative Controls Section 6.0. Duke will locate the requirements which will be removed from the TSs in Catawba FSAR Chapter 16.0, Catawba Nuclear Station Selected Licensee Commitments. For the information of the Staff, Attachment 3 provides the proposed revision to the Catawba FSAR. It is our plan to locate a copy of FSAR Chapter 16.0 along with the TSs in the Control Room to allow ready access by the operators.

The addition of the fire protection program to the defined list of items requiring technical review and control and to the procedures and programs requirements in Section 6.0 of the TSs on Administrative Controls reinforces the importance of the fire protection program on plant safety. Therefore, these additions are appropriate and consistent with requirements established for similar programs such as the security and emergency plans. The changes to the Administrative Controls in Section 6.0 of the TSs assure a multi-discipline review of proposed changes to those requirements which are removed from the TSs and placed in plant procedures.

The standard fire protection license condition has been instituted for both Catawba Units 1 and 2. For Unit 1 the standard license condition was implemented as Amendment 57 to Facility Operating License NPF-35. The Facility Operating License for Catawba Unit 2, NPF-52, included the standard license condition as License Condition (6).

The changes in this proposed amendment are consistent with requirements outlined in Generic Letter 88-12. This proposed amendment will remove fire protection systems and fire brigade staffing from the TSs, and will aid administrative controls to support the Fire Protection Program. The operational conditions, remedial actions, test and fire brigade staffing requirements deleted from the TSs will be added to FSAR Chapter 16.0, Catawba Selected Licensee Commitments. The requirement to institute the standard fire protection license condition has already been met.

ANALYSIS OF SIGNIFICANT HAZARDS CONSIDERATION

:

This analysis is provided to justify that the proposed amendment involves no significant hazards considerations. 10CFR 50.92 states that an amendment contains no significant hazards considerations if operation in accordance with the amendment would not:

- Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- Create the possibility of a new or different accident from any previously evaluated; or
- 3) Involve a significant reduction in the margin of safety.

This TS Amendment is proposed to implement Generic Letter 86-10, Implementation of Fire Protection Requirements. The proposed amendment follows the guidelines given in Generic Letter 88-12, Removal of Fire Protection Requirements from the Technical Specifications. This change is administrative, in that none of the technical requirements are being changed. The proposed change removes the existing requirements from the TS and puts them in FSAR Chapter 16.0. Since the technical content of the Fire Protection requirements has not changed, this amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The changes to the Fire Protection Requirements in this proposed amendment are administrative. Since the technical requirements have not changed, this amendment does not create the possibility of a new or different type of accident from any previously evaluated.

The technical requirements for Fire Protection will be moved from the TS to the FSAR Chapter 16.0. Because requirements will not change, operating and testing procedures will remain the same. Plant procedures, which already exist, will continue to provide the specific instructions for implementing LCOs, Actions, and Surveillance Requirements. Since the technical requirements are not changing, this change does not involve a significant reduction in the margin of safety.

For all of the above reasons, Duke Power concludes that this proposed amendment does not involve a Significant Hazards Consideration.

The proposed TS change has been reviewed against the criteria of 10 CFR 51.22(c)(9) for environmental considerations. As shown above, the proposed change does not involve any significant hazards consideration, nor increase the types or amounts of effluents that may be released offsite, nor increase the individual or cumulative occupational radiation exposure. Based on this, The proposed Technical Specification change meets the criteria given in 10CFR 51.22(c)(9) for categorical exclusion from the requirement for an Environmental Impact Statement.