PRIORITY  Normal  DISPOSITION OF THE OF THE TRANSMITTAL SIGN OTHERWISE IDENTIFIED  1) 02546 WC LIBRARY - MG01WC  2) 03044 MCG DOC CNTRL MISC MAN MG05DM  3) 03379 D E CALDWELL MG01MM  4) 03447 HARRY J SLOAN MG01RP  5) 03614 MCG OPS PROCEDURE GP MG01OP  6) 03744 OPS TRNG MGR. MG03OT  7) 03759 U S NUC REG WASHINGTON, DC  8) 04809 MCG PLANT ENG. LIBR. MG05SE  9) 09460 W C SPENCER MG01RP  10) 09665 JON H THOMPSON, USNRC	ATURE UNLES	S RECIPIEN	DOC  MCGI  RECCI  SELE	Duke Ene UMENT TRA  REFE UIRE NUCLEAR  DRD RETENTION  CTED LICENSE  JAL (SLC)	ANSI EREN STAT	CE TION 1188			₹M	QA OT	CON	DITIOI ACKNO R OTHE VLEDG Duke McGu DCRI 13225	ransr N OWLE ER ACH E REC Energ Jire M MC 5 Hag	mittal # EDGEM KNOWLE EIPT BY  GO2DM ers Fer e, N.C.	IENT EDGEM RETUR	REQUIENT RE	IRED		Yes Yes	— No
				Page 2	of 2					Re										
DOCUMENT NO	QA COND	REV#/	DATE	DISTR CODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTAL
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REMARKS: PLEASE UPDATE ACCORDINGLY.												S	D C	APPS						
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BY:

B C BEAVER MG01RC BCB/TLC

PRIORITY Normal DISPOSITION OF THE OF THE TRANSMITTAL SIGN OTHERWISE IDENTIFIED	IATURE UNLES											-	09/11		nittal #	<b></b>	DUI	K122	5500	21	
1) 00003 NRI&IA MGR EC05O 2) 00070 VICKIE BREWER - MG03OT 3) 00200 M E CARROLL EC08H 4) 00297 V M MCCREE REG ATL, GA 5) 00422 MCG BONNIE C BEAVER - MG01RC 6) 00485 OPS TEST GROUP - MG01OP 7) 00692 MCG OPS STAFF MGR MG01OP 8) 00707 SERV BLDG FILE ROOM - MG01S1 9) 00841 OPS HUMAN PERFORMANCE - MG01OP 10) 01202 K L CRANE - MG01RC 11) 01492 BLUE DOT LIBRARY MG02MO 12) 01503 VICKIE L MC GINNIS - MG03OT 13) 01623 G L MONTGOMERY MG01WC 14) 02467 ELECT. LICENSING LIBRARY EC050		M RI SI	ICGU ECOI	Duke Energy JMENT TRA  REFEI  PREFEIT NUCLEAR SET ON RETENTION  COTED LICENSEE  AL (SLC)	REN STAT	CE ION 1188	,		_	М	QA OT	CON HER A	DITION ACKNO R OTHE VLEDGE Duke McGu DCRI 13225	IOWLEDGEMENT REQUIRED  Yes  JER ACKNOWLEDGEMENT REQUIRED, PLEASE  GE RECEIPT BY RETURNING THIS FORM TO:  E Energy			No No				
15) 02532 RESIDENT NRC INSPECT MG01NRC				Page 1 c	f 2						Re										· .
DOCUMENT NO	QA COND	REV #/ DA	ATE	DISTR CODE	1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	TOTAL
LOES 2 PAGES SLC 16.9.6 11 PAGES	NA NA	111 05/16/1 130 09/05/1		MADM-03A	V1	V1	V1	1	V1	T1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	24
REMARKS: PLEASE UPDATE ACCORDINGLY.													٧		PRESI						
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BY:

B C BEAVER MG01RC BCB/TLC

# SELECTED LICENSEE COMMITMENTS (SLC) LOES

## SLCs ARE REVISED PER SECTION

SECTION	REVISION NUMBER	DATE
SECTION		
16.1	REVISION 32	12/2/02
16.2	REVISION 90	3/13/07
16.3	REVISION 48	7/31/03
16.4	Not Issued	0202/40
16.5.1	REVISION 115	0308/10 12/14/99
16.5.2	REVISION 0	
16.5.3	REVISION 0	12/14/99 3/23/04
16.5.4	REVISION 55 REVISION 0	12/14/99
16.5.5	DELETED - REVISION 120	12/30/10
16.5.6	REVISION 53	1/13/04
16.5.7	REVISION 0	12/14/99
16.5.8 16.5.9	REVISION 0	06/10/09
16.5.10	REVISION 100	4/9/03
16.6.1	REVISION 0	12/14/99
16.6.2	DELETED - REVISION 43	6/11/03
16.6.3	REVISION 61	04/07/05
16.6.4	REVISION 27	06/12/02
16.7.1	REVISION 0	12/14/99
16.7.2	REVISION 80	10/1/05
16.7.3	REVISION 0	12/14/99
16.7.4	REVISION 1	4/11/00
16.7.5	REVISION 0	12/14/99
16.7.6	REVISION 103	12/03/08
16.7.7	REVISION 0	12/14/99
16.7.8	REVISION 77	10/12/05
16.7.9	REVISION 97	10/06/08
16.7.10	REVISION 0	12/14/99
16.7.11	REVISION 71	05/25/05
16.8.1	REVISION 98	11/1/07
16.8.2	REVISION 0	12/14/99
16.8.3	REVISION 121	12/30/10
16.9.1	REVISION 53	1/13/04
16.9.2	REVISION 81	6/15/06
16.9.3	REVISION 106	05/26/09
16.9.4	REVISION 83	7/12/06
16.9.5	REVISION 81	6/15/06
16.9.6	REVISION 130	5/16/12
16.9.7	REVISION 122	1/14/11
16.9.8	REVISION 96	9/10/07
16.9.9	REVISION 101	4/02/08
16.9.10	DELETED - REVISION 13	2/26/01
16.9.11	REVISION 22	2/25/02
16.9.12	REVISION 101	4/02/08

# SELECTED LICENSEE COMMITMENTS (SLC) LOES

## SLCs ARE REVISED PER SECTION

SECTION	REVISION NUMBER	DATE
16.9.13	DELETED - REVISION 13 REVISION 22	2/26/01
16.9.14		2/25/02
16.9.15	REVISION 116	4/7/10
16.9.16	REVISION 111	09/09/09
16.9.17	REVISION 86	1/17/07
16.9.18	REVISION 0	12/14/99
16.9.19	REVISION 102	9/3/08
16.9.20	REVISION 8	11/30/00
16.9.21	REVISION 0	12/14/99
16.9.22	REVISION 109	8/13/09
16.9.23	REVISION 88	1/17/07
16.9.24	DELETED - REVISION 74	6/27/05
16.9.25	REVISION 87	1/17/07
16.10.1	REVISION 56	4/6/04
16.11.1	REVISION 112	2/4/10
16.11.2	REVISION 84	7/19/06
16.11.3	REVISION 0	12/14/99
16.11.4	REVISION 0	12/14/99
16.11.5	REVISION 0	12/14/99
16.11.6	REVISION 112	2/4/10
16.11.7	REVISION 84	7/19/06
16.11.8	REVISION 0	12/14/99
16.11.9	REVISION 0	12/14/99
16.11.10	REVISION 0	12/14/99
16.11.11	REVISION 41	8/21/03
16.11.12	REVISION 67	2/28/05
16.11.13	REVISION 91	3/22/07
16.11.14	REVISION 21	1/17/02
16.11.15	REVISION 21	1/17/02
16.11.16	REVISION 1	4/11/00
16.11.17	REVISION 118	10/19/10
16.11.18	REVISION 0	12/14/99
16.11.19	REVISION 0	12/14/99
16.11.20	REVISION 0	12/14/99
16.12.1	REVISION 0	12/14/99
16.12.2	REVISION 0	12/14/99
16.13.1	REVISION 51	10/1/03
16.13.2	DELETED – REVISION 75	7/20/05
16.13.3	DELETED - REVISION 75	7/20/05
16.13.4	REVISION 58	5/11/04
	REVISION 0	12/14/99
16.14.1		
16.14.2	REVISION 104	3/18/09

#### 16.9 AUXILIARY SYSTEMS

#### 16.9.6 Fire Detection Instrumentation

COMMITMENT

The fire detection instrumentation for each fire detection zone shown

in Table 16.9.6-1 shall be OPERABLE.

**APPLICABILITY** 

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

#### **REMEDIAL ACTIONS**

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One or more, but not more than half, of the Function A fire detectors in any zone inoperable.	A.1	Restore the inoperable instrument(s) to OPERABLE status.	14 days
В.	More than half of the Function A fire detectors in any zone inoperable.  OR	B.1	Establish fire watch patrol to inspect zones outside containment with inoperable instruments.	1 hour AND Once per hour thereafter
	One or more Function B fire detectors inoperable.  OR	B.2.1	Establish a fire watch patrol to inspect zones inside containment with inoperable instruments.	1 hour AND Once per 8 hours thereafter
	Two or more adjacent fire detectors inoperable.  OR  Required Action and associated Completion Time of Condition A not met.	B.2.2	Monitor containment air temperature at the locations given in ITS 3.6.5.1 or 3.6.5.2.	Once per hour

(continued)

REMEDIAL ACTIONS (continued)

	CONDITION		REQUIRED ACTION	COMPLETION TIME
C.	One or more annulus fire detectors inoperable.	C.1	Perform a fire watch patrol of the annulus.	1 hour
		AND		
	•	C.2.1	Verify at least one adjacent annulus fire detector zone is OPERABLE.	Once per hour thereafter
		<u>0</u>	<u>R</u>	
		C.2.2	Perform a fire watch patrol of the annulus if no adjacent zone is OPERABLE.	Once per 8 hours thereafter

**TESTING REQUIREMENTS** 

	TEST	FREQUENC		
TR 16.9.6.1	Verify the non-supervised circuits associated with detector alarms between the instrument and the control room are OPERABLE.	31 days		
TR 16.9.6.2	Verify the NFPA Standard 72D supervised circuits supervision associated with detector alarms are OPERABLE.	6 months		
TR 16.9.6.3	Perform a TADOT on fire detectors which are accessible during plant operation.	6 months		
	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	(continued)		

TESTING REQUIREMENTS (continued)								
	TEST	FREQUENCY						
_TR_16.9.6.4	Perform a TADOT on fire detectors which are not accessible during plant operation.	Prior to entering MODE 4 when the unit has been in MODE 5 for 24 hours or more, if testing has not been performed in previous 6 months						
TR 16.9.6.5	Different detectors shall be selected for each test.							
	Perform a TADOT on at least one detector on each signal initiating circuit for fixed temperature/rate of rise restorable spot type heat detectors which are accessible during plant operation.	6 months						
TR 16.9.6.6	Perform a TADOT on fixed temperature/rate of rise restorable spot type heat detectors which are not accessible during plant operation.	Prior to entering MODE 4 when the unit has been in MODE 5 for 24 hours or more, if testing has not been performed in previous 6 months						
TR 16.9.6.7	NOTES      Shall be removed and tested.  Replacement of all fixed temperature/rate of rise non-restorable spot type heat detectors within population							
	satisfies testing requirement.  Perform a functional test on at least 2% of the fixed temperature/rate of rise non-restorable spot type heat detectors.	5 years						
TR 16.9.6.8	Replace all fixed temperature/rate of rise non-restorable spot type heat detectors.	15 years						

TABLE 16.9.6-1
FIRE DETECTION INSTRUMENTATION<sup>(1)</sup>

Detector	Description	Location	Number of	Number of	Function <sup>(2)</sup>
Zone	5 1 6 1 15	DOD 44	Smoke Detectors	Heat Detectors	Δ
1	Reactor Coolant Pump 1A	RCP-1A	U	1	A
2	Reactor Coolant Pump 1B	RCP-1B	0	1	A
3	Reactor Coolant Pump 1C	RCP-1C	0	1	Α
4	Reactor Coolant Pump 1D	RCP-1D	0	1	Α
5	Reactor Coolant Pump 2A	RCP-2A	0	1	Α
6	Reactor Coolant Pump 2B	RCP-2B	0	1	Α
7	Reactor Coolant Pump 2C	RCP-2C	0	1	Α
8	Reactor Coolant Pump 2D	RCP-2D	0	1	Α
29	Aux. Bldg. Vent Filter	KK52-53 EL. 767	2	0	Α
30	Elec. Pen. Rm.	CC-51 EL. 767	9	0	Α
31	Elec. Pen. Rm.	CC-51 EL. 750	10 <sup>(5)</sup>	0	Α
32	Elec. Pen. Rm.	CC-51 EL. 733	11 <sup>(5)</sup>	0	Α
33	Unit 2 Aux. Bldg. Vent. Filter	KK-59/60 EL. 767	2	0	Α
34	Unit 2 Elec. Penetration Room	CC-61 EL. 767	9	0	Α
35	Unit 2 Elec. Penetration Room	CC-61 EL. 750	10 <sup>(5)</sup>	0	Α
36	Unit 2 Elec. Penetration Room	CC-61 EL. 733	11 <sup>(5)</sup>	0	Α
37	Diesel Gen. 1A	CC-43 EL. 733	0(0)	8(4)	A(B)
38	Diesel Gen. 2A	CC-69 EL. 733	0(0)	8(4)	. A(B)
39	Cable Room	CC-55 EL. 750	11 <sup>(5)</sup>	Ò	À
40	Control Room	CC-56 EL. 767	24	19	· A
41	Swgr. Rm. IETA	AA-49 EL. 750	9 <sup>(5)</sup>	0	Α
42	Swgr. Rm. IETB	AA-49 EL. 733	10 <sup>(5)</sup>	0	Α
43	SWG. Room 2ETA	AA-62 EL, 750	9 <sup>(5)</sup>	0	Α
14	SWG. Room 2ETB	AA-62 EL. 733	10 <sup>(5)</sup>	0	Α
45A	Battery Room EVCA	CC-54 EL. 733	2 <sup>(5)</sup>	0	A
45B	Battery Room EVCB	CC-55 EL. 733	2 <sup>(5)</sup>	0	Α
45C	Battery Room EVCC	CC-56 EL. 733	<b>2</b> <sup>(5)</sup>	0	A
45D	Battery Room EVCD	CC-57 EL. 733	2 <sup>(5)</sup>	0	Α
45G	Battery Chg. Equip. & Pnl EVCA, EVCC	CC-56 EL. 733	13 <sup>(5)</sup>	Ö	A

TABLE 16.9.6-1

FIRE DETECTION INSTRUMENTATION<sup>(1)</sup>

Detector	Description	Location	Number of	Number of	Function <sup>(2)</sup>
Zone			Smoke Detectors	Heat Detectors	
45H	Battery Chg. Equip. & Pnl EVCB, EVCD	BB-56 EL. 733	12 <sup>(5)</sup>	0	Α
50	Diesel Gen. 1B	BB-43 EL. 733	0(0)	8(4)	A(B)
51	Diesel Gen. 2B	BB-69 EL. 733	0(0)	8(4)	A(B)
52	Unit 2 Cable Room	CC-57 EL. 750	11 <sup>(5)</sup>	0	Ä
61	Cont. Spray Pump 1A/Corridor	GG-55 EL. 695	2 <sup>(5)</sup>	0.	Α
62	Cont. Spray Pump 1B/Cooridor	GG-56 EL. 695	2 <sup>(5)</sup>	0	Α
63	RHR Pump 1B	FF-54 EL. 695	1 <sup>(5)</sup>	0	· A
64	RHR Pump 1A	GG-54 EL. 695	1 <sup>(5)</sup>	0	Α
66	Cont. Spray Pump 2B/Corridor	GG-56 EL. 695	2 <sup>(5)</sup>	0	Α
67	Cont. Spray Pump 2A/Cooridor	GG-57 EL. 695	2 <sup>(5)</sup>	0	Α
68	RHR Pump 2A	GG-58 EL. 695	1 <sup>(5)</sup>	0	Α
69	RHR Pump 2B	FF-58 EL. 695	1 <sup>(5)</sup>	0	Α
70	Aux. FW Pumps	BB-51 EL. 716	10(0) <sup>(5)</sup>	0(1)	A(B)
72	Mech. Pen. Rm./Cables	JJ-51 EL. 716	4 <sup>(5)</sup>	ò	À
73	Corridor/Cables	HH-53 EL. 716	6 <sup>(5)</sup>	0	Α
74	Sample Panel/Cables	EE-55 EL. 716	5 <sup>(5)</sup>	0	Α
75	Cent. Chg. Pump 1B	JJ-55 EL. 716	2 <sup>(5)</sup>	0	Α
76	Cent. Chg. Pump 1A	JJ-55 EL. 716	2 <sup>(5)</sup>	0	Α
77	PD Pump #1	JJ-54 EL. 716	2 <sup>(5)</sup>	0	Α
78	Safety Injection Pump 1A	HH-54 EL. 716	2 <sup>(5)</sup>	0	Α
79	Safety Injection Pump 1B	GG-54 EL. 716	2 <sup>(5)</sup>	0	Α
80	Aisle/Cables	GG-55 EL. 716	13 <sup>(5)</sup>	0	Α
81	Aisle/Cables	GG-57 EL. 716	11 <sup>(5)</sup>	0	Α
82	Cent. Chg. Pump 2B	JJ-57 EL. 716	2 <sup>(5)</sup>	0	Α
83	Cent. Chg. Pump 2A	JJ-57 EL. 716	2 <sup>(5)</sup>	0	Α
84	PD Pump #2	JJ-58 EL. 716	2 <sup>(5)</sup>	0	Α
85	Safety Injection Pump 2A	HH-58 EL. 716	2 <sup>(5)</sup>	0	Α
86	Safety Injection Pump 2B	GG-58 EL. 716	2 <sup>(5)</sup>	0	Α
87	Aux. FW Pumps	CC-60 EL. 716	10(0) <sup>(5)</sup>	0(1)	A(B)

TABLE 16.9.6-1

FIRE DETECTION INSTRUMENTATION<sup>(1)</sup>

Detector	Description	Location	Number of	Number of	Function <sup>(2)</sup>
Zone			Smoke Detectors	Heat Detectors	
88	Mech. Penetration Room/Cables	JJ-61 EL. 716	4 <sup>(5)</sup>	0	Α
90	Corridor/Cables	NN-59 EL. 716	5 <sup>(5)</sup>	0	Α
91	Corridor/Cables	EE-53 EL. 733	4	4	Α
92	Corridor/Cables	JJ-51 EL. 733	6 <sup>(5)</sup>	0	Α
93	Corridor/Cables	NN-52 EL. 733	12 <sup>(5)</sup>	0	Α
94	Aisle/Cables	JJ-55 EL. 733	9 <sup>(5)</sup>	0	Α
95	600V MCC 1EMXB - 1EMXB3	FF-55 EL. 733	1 <sup>(5)</sup>	0	Α
96	Cable Tray Access	EE-55 EL. 733	2 <sup>(5)</sup>	0	Α
97	Cable Tray Access	EE-57 EL. 733	2 <sup>(5)</sup>	0	Α
98	600V MCC 2EMXB - 2EMXB3	FF-57 EL. 733	1 <sup>(5)</sup>	0	Α
99	Aisle/Cables	JJ-57 EL. 733	9 <sup>(5)</sup>	0	Α
100	Corridor/Cables	NN-58 EL. 733	12 <sup>(5)</sup>	0	Α
101	Corridor/Cables	JJ-61 EL. 733	6 <sup>(5)</sup>	0	Α
102	Corridor/Cables	EE-59 EL. 733	4	4	Α
103	Corridor/Cables	MM-51 EL. 750	6 <sup>(5)</sup>	0	Α
104	Hatch Area Cables	LL-53 EL. 750	7 <sup>(5)</sup>	0	Α
106	600V MCC 1EMXA	FF-54 EL. 750	4 <sup>(5)</sup>	0	Α
107	600V MCC 2EMXA	FF-57 EL. 750	5 <sup>(5)</sup>	0	Α
108	Aisle/Cables	JJ-55 EL. 750	14 <sup>(5)</sup>	0	Α
109	Hatch Area Cables	PP-57 EL. 750	15 <sup>(5)</sup>	0	Α
110	Corridor/Cables	PP-60 EL. 750	8 <sup>(5)</sup>	0	Α
111	Corridor/Cables	LL-59 EL. 750	6 <sup>(5)</sup>	0	Α
112	Aisle/Cables	JJ-57 EL. 750	13 <sup>(5)</sup>	0	Α
113	HVAC Equipment Area/Cables	FF-56 EL. 767	11 <sup>(5)</sup>	0	Α
114	Respiratory Equipment Room	GG-54 EL. 767	1 <sup>(5)</sup>	0	Α
115	Corridor/Cables	JJ-54 EL. 767	16 <sup>(5)</sup>	0	Α
116	HVAC Equipment Area/Cables	NN-52 EL. 767	8 <sup>(5)</sup>	0	Α
120	Environmental Lab	PP-55 EL. 767	1 <sup>(5)</sup>	0	Α
122	HVAC Equipment Area	NN-59 EL. 767	10 <sup>(5)</sup>	0	Α

TABLE 16.9.6-1

FIRE DETECTION INSTRUMENTATION(1)

Detector	Description	Location	Number of	Number of	Function <sup>(2)</sup>
Zone			Smoke Detectors	Heat Detectors	
123	Corridor/Cables	JJ-57 EL. 767	18 <sup>(5)</sup>	0	Α
125	Fuel Pool Area	NN-62 EL. 778+10	Note 4	Note 4	Α
127	Fuel Pool Area	NN-50 EL. 731+ 6	Note 4	Note 4	Α
128	Aisle/Cable	EE-57 EL. 716	5 <sup>(5)</sup>	0	Α
129	600V MCC 2EMXH	KK-56 EL. 733	1 <sup>(5)</sup>	0	Α
130	Cables/KF Pumps	PP-52 EL. 750	4 <sup>(5)</sup>	0	Α
131	Respiratory	HH-56 EL. 767	6 <sup>(5)</sup>	0	. A
134	RB Pipe Corridor-Unit 1	215° - 270°	. 0	5	Α
135	RB Pipe Corridor-Unit 1	270°- 315°	0	5	Α
136	RB Pipe Corridor-Unit 1	315° - 0°	0	6	Α
137	RB Pipe Corridor-Unit 1	0° - 44°	0	4	Α
138	RB Pipe Corridor-Unit 1	44° - 90°	0	4	Α
139	RB Pipe Corridor-Unit 1	90° - 126°	0	4	Α
140	RB Pipe Corridor-Unit 1	126° - 173°	0	7	Α
141	RB Below Oper. Floor-Unit 1	329° - 349°	0	7	Α
142	RB Below Oper. Floor-Unit 1	13° - 29°	0	4	Α
143	RB Below Oper. Floor-Unit 1	34° - 51°	0	3	Α
144	RB Below Oper. Floor-Unit 1	51° - 124°	0	13	Α
145	RB Below Oper. Floor-Unit 1	124° - 143°	0	3	Α
146	RB Below Oper. Floor-Unit 1	143° - 167°	0	8	Α
147	RB Below Oper. Floor-Unit I	RCP - 1A Motor	0	5	Α
148	RB Below Oper, Floor-Unit 1	RCP - 1 B Motor	0	2	Α
149	RB Below Oper. Floor-Unit 1	RCP - 1C Motor	0	4	Α
150	RB Below Oper. Floor-Unit 1	RCP - 1D Motor	0	5	Α
151	RB Below Oper. Floor-Unit 1	Purge Filter Bed	0	2	Α
152	RB Below Oper. Floor-Unit 1	170°-190°, R20'-R35'	0	2	Α
153A	RB Annulus - Unit 1	0°-360° EL. 745	0	Note 3	В
153B	RB Annulus - Unit 1	0°-360° EL. 765	0	Note 3	В
153C	RB Annulus - Unit 1	0°-360° EL. 785	0	Note 3	В

TABLE 16.9.6-1 FIRE DETECTION INSTRUMENTATION<sup>(1)</sup>

Detector	Description	Location	Number of	Number of	Function <sup>(2)</sup>
Zone			Smoke Detectors	Heat Detectors	
153D	RB Annulus - Unit 1	0°-360° EL. 805	0	Note 3	В
153E	RB Annulus - Unit 1	0°-360° EL. 820	0	Note 3	В
153F	RB Annulus - Unit 1	0°-360° EL. 835	0	Note 3	В
163	Unit 2 RB Pipe Corridor	215° - 270°	0	4	Α
164	Unit 2 RB Pipe Corridor	270°- 315°	0	5	Α
165	Unit 2 RB Pipe Corridor	315° - 0°	0	6	Α
166	Unit 2 RB Pipe Corridor	0° - 44°	0	4	Α
167	Unit 2 RB Pipe Corridor	44° - 90°	0	4	Α
168	Unit 2 RB Pipe Corridor	90° - 126°	0	4	Α
169	Unit 2 RB Pipe Corridor	126° - 173°	0	7	Α
170	Unit 2 RB Below Oper. Floor	329° - 347°	0	7	Α
171	Unit 2 RB Below Oper. Floor	13° - 29°	0	4	Α
172	Unit 2 RB Below Oper. Floor	34° - 51°	0	3	Α
173	Unit 2 RB Below Oper. Floor	51° - 124°	0	13	Α
174	Unit 2 RB Below Oper, Floor	124° - 143°	0	3	Α
175	Unit 2 RB Below Oper, Floor	143° - 167°	0	8	Α
176	Unit 2 RB Below Oper. Floor	RCP - 2A Motor	0	4	Α
177	Unit 2 RB Below Oper. Floor	RCP – 2B Motor	0	3	Α
178	Unit 2 RB Below Oper. Floor	RCP – 2C Motor	0	3	Α
179	Unit 2 RB Below Oper. Floor	RCP – 2D Motor	0	5	Α
180	Unit 2 RB Below Oper. Floor	Purge Filter Bed	0	2	Α
181	Unit 2 RB Below Oper. Floor	170°-190°, R20'-R35'	0	2	Α
182A	RB Annulus – Unit 2	0°-360° EL. 745	0	Note 3	. В
182B	RB Annulus – Unit 2	0°-360° EL. 765	0	Note 3	В
182C	RB Annulus – Unit 2	0°-360° EL. 785	0	Note 3	В
182D	RB Annulus – Unit 2	0°-360° EL. 805	0	Note 3	В
182E	RB Annulus – Unit 2	0°-360° EL. 820	0	Note 3	В
182F	RB Annulus – Unit 2	0°-360° EL. 835	0	Note 3	В



### FIRE DETECTION INSTRUMENTATION(1)

Detector Zone	Description	Location	Number of Smoke Detectors	Number of Heat Detectors	Function <sup>(2)</sup>
197	Mech. Pen. Rm./UHI Valves	JJ-52 EL. 750	5 <sup>(5)</sup>	0	Α
198	Mech. Pen. Rm./UHI Valves	JJ-60 EL. 750	5 <sup>(5)</sup>	0	Α
206	Control Room Control Board	AA-56 EL. 767	20	5	Α

#### NOTES:

- 1. The fire detection instruments located within containment are not required to be OPERABLE during the performance of Type A containment leakage rate tests.
- 2. Function A: Early warning fire detection and notification only.
  Function B: Actuation of fire suppression system and early warning and notification.
- 3. The fire detection instruments located in the RB Annulus are restorable, cable-type sensors which cover the entire 360 degrees of the annulus at each subzone elevation.
- 4. Upon implementation of MD501276 / EC95846, detection in each Spent Fuel Pool areas (Unit 1, Fire Zone 127 and Unit 2, Fire Zone 125) will consist of 4 video-based (camera) flame and smoke detectors (2 mounted above the Bypass Leakage Enclosure directed North and 2 mounted above the New Fuel Vault directed South), 1 linear heat detection circuit in the uppermost cable tray bordering the pool, 6 multimode heat/smoke detectors in the overhead of the Decon and vestibule areas adjacent to the containment, and 4 multimode heat/smoke detectors in the New Fuel Vault. A camera failure should be treated as any other single detector failure when determining remedial actions.
- 5. Upon implementation of EC95846, EC95847, and subsequent modifications, the separate smoke and heat detectors are replaced with single multi-sensor detectors.

#### **BASES**

Fire detection instrumentation is required to be operable at all times unless a complete evaluation has been made of the area protected by any particular instrument and all equipment in that area has been identified and determined not to be required operable. This evaluation would have to consider not only mechanical equipment in the area but all piping, tubing, and cables that transit through the area.

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 the extinguishing agent 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. An inoperable detector is defined as: a) a fire alarm with no actual fire or b) a trouble alarm.

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 the Fire Suppression Systems, actuated by fire detectors, represents a significant degradation of fire protection for any area. The establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABLE status. If fire detection capability is monitored by a local or remote panel, the fire watch patrol needs only check the panel to verify no loss in fire detection capability. Note that Fire Alarm Control Panels (FACP) 1 and 9 monitor all areas that the Fireworks Operator Interface Computer monitors and both FACP 1 and 9 activate control room annunciator 1AD13.E-3. Therefore loss of the Fireworks Operator Interface Computer does not constitute a loss of fire detection capability for those areas. Note that the MNS Fire Protection Safe Shutdown Review considers the annulus to be part of the containment building.

This selected licensee commitment is part of the McGuire Fire Protection Program and therefore subject to the provisions of McGuire Facility Operating License Conditions C.4 (Unit 1) and C.7 (Unit 2).

TR 16.9.6.7, "Perform a functional test on at least 2% of the fixed temperature/rate of rise non-restorable spot type heat detectors," is satisfied by either testing within population or replacement of all heat detectors as per TR 16.9.6.8.

TR 16.9.6.8, "Replace all fixed temperature/rate of rise non-restorable spot type heat detectors," purpose is compliance with NFPA 72-2002 Table 10.4.2.2 Device 13 (d) 3. This is applicable to all containment fire zones (Unit 1 zones 134 – 152, Unit 2 zones 163 – 181).

#### **REFERENCES**

- 1. McGuire Nuclear Station UFSAR, Chapter 9.5.1
- 2. McGuire Nuclear Station SER Supplement 2, Chapter 9.5.1 and Appendix D
- 3. McGuire Nuclear Station SER Supplement 5, Chapter 9.5.1 and Appendix B
- 4. McGuire Fire Protection Review, as revised
- 5. McGuire Nuclear Station SER Supplement 6, Chapter 9.5.1 and Appendix C
- 6. NFPA Codes 72D and 72E
- 7. McGuire Nuclear Station Facility Operating Licenses, Unit 1 License Condition C.(4) and Unit 2 License Condition C.(7)