Docket No. 50-364

May 17, 1984

Mr. R. P. McDonald
Senior Vice President
Alabama Power Company
P. O. Box 2641
Birmingham, Alabama 35291

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R10195

Dear Mr. McDonald:

The Commission has issued the enclosed Amendment No34 to Facility Operating License NPF-8 for the Joseph M. Farley Nuclear Plant, Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated November 24, 1982, supplemented March 23, 1984.

The amendment modifies Technical Specifications which the Commission required by license conditions to be added after the first refueling outage. A tabulation of containment penetration overcurrent protection devices and a listing of safety-related mechanical snubbers are added. Also, administrative changes to the containment ventilation system reflect replacement of the 18-inch valves with 8-inch valves to meet license condition 2.C.(17) requirements. Other minor, non-substantive administrative changes, proposed in your supplement dated March 23, 1984, are made to comply with Commission guidance for use of the ventilation system.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

/s/EReeves

Edward A. Reeves, Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:
1. Amendment No.34 to NPF-8
3. Safety Evaluation

cc: w/enclosures:
See next page

ORB#1:DL	ORB#1:DL	C-ORB#1:DL	OELD	AD:OR:DL
CParrish	EReeves;ps	SVarga		GLainas
5/2/84	5/2/84	5/2/84	5/11/84	5/15/84

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PDR ADOCK 05000364
P PDR

Mr. R. P. McDonald
Alabama Power Company

Joseph M. Farley Nuclear Plant
Units 1 and 2

cc: Mr. W. O. Whitt
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

ALABAMA POWER COMPANY

DOCKET NO. 50-364

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.34
License No. NPF-8

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Alabama Power Company (the licensee) dated November 24, 1982, supplemented March 23, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-8 is hereby amended to read as follows:

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P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 34 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 17, 1984

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 34 FACILITY OPERATING LICENSE NO. NPF-8

DOCKET NO. 50-364

Revised Appendix A as follows:

Remove Pages	Insert Pages
3/4 6-10	3/4 6-10
3/4 7-49	3/4 7-49
none	3/4 7-49a through 7-49bb
3/4 8-20	3/4 8-20
3/4 8-21	3/4 8-21
3/4 8-22	3/4 8-22
3/4 8-23	3/4 8-23
3/4 8-24	3/4 8-24
3/4 8-25	3/4 8-25
3/4 8-26	3/4 8-26
3/4 8-27	3/4 8-27
3/4 8-28	3/4 8-28
none	3/4 8-28A through 3/4 8-28D
B 3/4 6-2	B 3/4 6-2

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.7 The 48-inch containment purge supply and exhaust isolation valves (CBV-HV-3198A, 3198D, 3196, 3197) shall be deactivated and secured in their closed position. The 8-inch containment vent supply and exhaust isolation valves may be open for safety related reasons.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one 48-inch containment purge supply and/or one exhaust isolation valve open, close the open valve(s) within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.7.1 The 48-inch containment purge supply and exhaust isolation valves shall be determined closed at least once per 31 days.

4.6.1.7.2 The valve seals of the 48-inch and the 8-inch vent supply and exhaust isolation valves shall be replaced at least once per 5 years.

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
AUX. STEAM					
SS-13247	2	Aux. Bldg. El. 134' 1" and 135' 4 1/4", Room 2241	A	No	No
SS-13250	1	Aux. Bldg. El. 133' 2" Room 2241	A	No	No
SS-13253	2	Aux. Bldg. El. 133' 9" and 135' 0 1/4", Room 2241	A	No	No
SS-13255	1	Aux. Bldg. El. 133' 3 1/2" Room 2241	A	No	No
SS-13721	2	Aux. Bldg. El. 101' 8 3/4" Room 2193	A	No	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
CHEMICAL AND VOLUME CONTROL					
SS-11894	1	CTMT Bldg. El. 118' 0" NW Quadrant	I	Yes	No
SS-11899	2	CTMT Bldg. El. 117' 8" NW Quadrant	I	Yes	No
SS-11902	2	CTMT Bldg. El. 113' 9" NW Quadrant	I	Yes	No
SS-11974	1	CTMT Bldg. El. 128' 10" SW Quadrant	I	Yes	No
SS-11991	1	CTMT Bldg. El. 128' 8" NE Quadrant	I	Yes	No
SS-12002	1	CTMT Bldg. El. 128' 4" NW Quadrant	I	Yes	No
SS-12003	1	CTMT Bldg. El. 128' 10" NW Quadrant	I	Yes	No
SS-12010	1	CTMT Bldg. El. 129' 2" NE Quadrant	I	Yes	No
SS-12011	1	CTMT Bldg. El. 133' 0" NE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12013	2	CTMT Bldg. El. 133' 0" and 133' 9 5/8", NW Quadrant	I	Yes	No
SS-12114	1	CTMT Bldg. El. 128' 10" SW Quadrant	I	Yes	No
SS-12146	1	CTMT Bldg. El. 128' 10" SW Quadrant	I	Yes	No
SS-12147	1	CTMT Bldg. El. 128' 10" SW Quadrant	I	Yes	No
SS-12175	1	CTMT Bldg. El. 125' 8 5/16" SW Quadrant	I	Yes	No
SS-12183	1	CTMT Bldg. El. 128' 6" SW Quadrant	I	Yes	No
SS-12184	1	CTMT Bldg. El. 128' 6" SW Quadrant	I	Yes	No
SS-12185	1	CTMT Bldg. El. 128' 6" SW Quadrant	I	Yes	No
SS-12213	1	CTMT Bldg. El. 128' 8" NE Quadrant	I	Yes	No
SS-12231	1	CTMT Bldg. El. 128' 5" SE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE. (Yes or No)
SS-12237	1	CTMT Bldg. El. 128' 5 7/8" SE Quadrant	I	Yes	No
SS-12242	1	CTMT Bldg. El. 128' 9 1/2" SE Quadrant	I	Yes	No
SS-12269	1	CTMT Bldg. El. 129' 8 3/4" NE Quadrant	I	Yes	No
SS-12274	1	CTMT Bldg. El. 128' 2 3/4" NW Quadrant	I	Yes	No
SS-12296	1	CTMT Bldg. El. 115' 6" SE Quadrant	I	Yes	No
SS-12346	1	CTMT Bldg. El. 131' 6" SE Quadrant	I	Yes	No
SS-12357	1	CTMT Bldg. El. 124' 8 1/2" SE Quadrant	I	Yes	No
SS-12368	1	CTMT Bldg. El. 173' 1 5/16" NW Quadrant	I	Yes	No
SS-12369	2	CTMT Bldg. El. 169' 0 11/16" NW Quadrant	I	Yes	No
SS-12370	2	CTMT Bldg. El. 159' 9 3/16" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12372	1	CTMT Bldg. El. 138' 11 5/16" NW Quadrant	I	Yes	No
SS-12456	1	CTMT Bldg. El. 115' 10 1/4" SW Quadrant	I	Yes	No
SS-12459	1	CTMT Bldg. El. 114' 10 5/8" SW Quadrant	I	Yes	No
SS-12473	2	CTMT Bldg. El. 120' 6 1/2" SW Quadrant	I	Yes	No
SS-12474	1	CTMT Bldg. El. 120' 0" SW Quadrant	I	Yes	No
SS-12476	1	CTMT Bldg. El. 120' 0" SW Quadrant	I	Yes	No
SS-12477	1	CTMT Bldg. El. 120' 0" SW Quadrant	I	Yes	No
SS-12482	1	CTMT Bldg. El. 125' 0" SW Quadrant	I	Yes	No
SS-12483	1	CTMT Bldg. El. 125' 0" SW Quadrant	I	Yes	No
SS-12484	2	CTMT Bldg. El. 125' 0" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12526	2	CTMT Bldg. El. 109' 7" 112' 0", SE Quadrant	I	Yes	No
SS-12527	2	CTMT Bldg. El. 111' 4 1/2" 112' 0", SE Quadrant	I	Yes	No
SS-12528	1	CTMT Bldg. El. 112' 0" SE Quadrant	I	Yes	No
SS-12373	1	CTMT Bldg. El. 138' 11 5/16" NW Quadrant	I	Yes	No
Ss-12543	1	CTMT Bldg. El. 108' 6" NE Quadrant	I	Yes	No
SS-12545	1	CTMT Bldg. El. 108' 6" NE Quadrant	I	Yes	No
SS-12547	1	CTMT Bldg. El. 110' 0" NE Quadrant	I	Yes	No
SS-12634	1	CTMT Bldg. El. 122' 10 1/2" SE Quadrant	I	Yes	No
SS-12639	1	CTMT Bldg. El. 123' 0" SE Quadrant	I	Yes	No
SS-12648	1	CTMT Bldg. El. 128' 6" SE Quadrant	I	Yes	No

Amendment No. 34

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12677	1	CTMT Bldg. El. 125' 2 1/2" SE Quadrant	I	Yes	No
SS-12684	1	CTMT Bldg. El. 129' 2" NE Quadrant	I	Yes	No
SS-12685	1	CTMT Bldg. El. 132' 8 3/4" NE Quadrant	I	Yes	No
SS-12686	1	CTMT Bldg. El. 129' 9 1/2" NE Quadrant	I	Yes	No
SS-12687	1	CTMT Bldg. El. 132' 7" NE Quadrant	I	Yes	No
SS-12700	1	CTMT Bldg. El. 122' 10 5/8" SW Quadrant	I	Yes	No
SS-12701	1	CTMT Bldg. El. 122' 10 5/8" SW Quadrant	I	Yes	No
SS-12703	1	CTMT Bldg. El. 122' 3" SW Quadrant	I	Yes	No
SS-12705	1	CTMT Bldg. El. 122' 3" SW Quadrant	I	Yes	No
SS-12713	1	CTMT Bldg. El. 124' 0 15/16" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12714	1	CTMT Bldg. El. 124' 0 15/16" NW Quadrant	I	Yes	No
SS-12716	1	CTMT Bldg. El. 124' 0 15/16" NW Quadrant	I	Yes	No
SS-12717	1	CTMT Bldg. El. 124' 0 15/16" NW Quadrant	I	Yes	No
SS-12720	1	CTMT Bldg. El. 122' 6" NW Quadrant	I	Yes	No
SS-12721	1	CTMT Bldg. El. 123' 3" NW Quadrant	I	Yes	No
SS-12722	1	CTMT Bldg. El. 123' 3" NW Quadrant	I	Yes	No
SS-12723	1	CTMT Bldg. El. 123' 3" NW Quadrant	I	Yes	No
SS-12762	2	CTMT Bldg. El. 107' 11 7/8" and 108' 0 1/8", SE Quadrant	I	Yes	No
SS-12763	2	CTMT Bldg. El. 108' 0" SE Quadrant	I	Yes	No
SS-12766	1	CTMT Bldg. El. 121' 7" SE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12478	1	CTMT Bldg. El. 120' 0" SW Quadrant	I	Yes	No
SS-12718	1	CTMT Bldg. El. 122' 6" NW Quadrant	I	Yes	No
SS-12350	1	CTMT Bldg. El. 132' 3 5/8" SE Quadrant	I	Yes	No
SS-12344	1	CTMT Bldg. El. 129' 6" SE Quadrant	I	Yes	No
SS-13704	1	Aux. Bldg. El. 136' 3 1/2" Room 2206	A	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
COMPONENT COOLING WATER					
SS-12129	1	CTMT Bldg. El. 133' 5 3/4" SW Quadrant	I	Yes	No
SS-12131	1	CTMT Bldg. El. 133' 5 3/4" SW Quadrant	I	Yes	No
SS-12135	1	CTMT Bldg. El. 132' 8 3/4" SW Quadrant	I	Yes	No
SS-12152	1	CTMT Bldg. El. 133' 0" SW Quadrant	I	Yes	No
SS-12154	1	CTMT Bldg. El. 126' 2 5/16" SW Quadrant	I	Yes	No
SS-12155	1	CTMT Bldg. El. 133' 0" SW Quadrant	I	Yes	No
SS-12249	1	CTMT Bldg. El. 133' 8 3/4" NW Quadrant	I	Yes	No
SS-12254	1	CTMT Bldg. El. 126' 2 5/16" SE Quadrant	I	Yes	No
SS-12516	1	CTMT Bldg. El. 132' 3" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12517	1	CTMT Bldg. El. 132' 1" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
CONTAINMENT SPRAY					
2CS-R198	2	CTMT Bldg. El. 273' 0" SW Quadrant	I	No	Yes
2CS-R199	2	CTMT Bldg. El. 273' 0" SW Quadrant	I	No	Yes
2CS-R202	2	CTMT Bldg. El. 255' 0" SE Quadrant	I	No	Yes
2CS-R203	2	CTMT Bldg. El. 255' 0" NE Quadrant	I	No	Yes
2CS-R254	2	CTMT Bldg. El. 268' 0" SE Quadrant	I	No	Yes
2CS-R266	2	CTMT Bldg. El. 266' 7" SW Quadrant	I	No	Yes

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
LIQUID WASTE DISPOSAL					
SS-12494	1	CTMT Bldg. El. 108' 6" SW Quadrant	I	Yes	No
SS-12496	1	CTMT Bldg. El. 108' 1" SW Quadrant	I	Yes	No
SS-12521	1	CTMT Bldg. El. 107' 9 7/8" NW Quadrant	I	Yes	No
SS-12523	2	CTMT Bldg. El. 107' 1" NW Quadrant	I	Yes	No
SS-12533	1	CTMT Bldg. El. 107' 8 3/4" NW Quadrant	I	Yes	No
SS-12534	1	CTMT Bldg. El. 107' 8 3/4" NW Quadrant	I	Yes	No
SS-12659	1	CTMT Bldg. El. 108' 6" SE Quadrant	I	Yes	No
SS-12660	1	CTMT Bldg. El. 107' 6 1/2" SE Quadrant	I	Yes	No
SS-12662	1	CTMT Bldg. El. 107' 5 1/8" SE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12522	1	CTMT Bldg. El. 107' 9 3/4" NW Quadrant	I	Yes	No
SS-13660	1	Aux. Bldg. El. 103' 10" Room 2184	A	No	No
2WP-BR70	1	CTMT Bldg. El. 106' 11 1/4" SW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICU TO REMOVE (Yes or No)
MAIN STEAM					
SS-13177	1	Aux. Bldg. El. 128' 3 1/4" Room 2241	A	No	No
SS-13179	2	Aux. Bldg. El. 127' 9" Room 2241	A	No	No
SS-13213	1	Aux. Bldg. El. 128' 8" Room 2241	A	No	No
SS-13217	1	Aux. Bldg. El. 128' 8" Room 2241	A	No	No
SS-13242	2	Aux. Bldg. El. 127' 7" and 127' 3 3/4", Room 2241	A	No	No
SS-13367	1	Aux. Bldg. El. 127' 3 3/4" Room 2241	A	No	No
SS-13725	1	Aux. Bldg. El. 127' 8 3/8" Room 2241	A	No	No
SS-14790	1	Aux. Bldg. El. 127' 3 3/4" Room 2241	A	No	No

Amendment No. 340

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-15757	1	Aux. Bldg. El. 127' 3 3/4" Room 2241	A	No	No
SS-15772	1	Aux. Bldg. El. 129' 3" Room 2241	A	No	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
REACTOR COOLANT					
2RC-BR1	1	CTMT Bldg. El. 172' 1" NW Quadrant	I	Yes	No
2RC-R116	2	CTMT Bldg. El. 168' 5" NW Quadrant	I	Yes	No
2RC-R6	1	CTMT Bldg. El. 174' 1 5/16" NW Quadrant	I	Yes	No
2RC-R7	2	CTMT Bldg. El. 175' 2" NW Quadrant	I	Yes	No
2RC-R8	2	CTMT Bldg. El. 161' 1" NW Quadrant	I	Yes	No
2RC-R9	1	CTMT Bldg. El. 174' 4 1/8" NW Quadrant	I	Yes	No
2RC-R11	2	CTMT Bldg. El. 171' 1" NW Quadrant	I	Yes	No
2RC-R18	2	CTMT Bldg. El. 163' 0" NW Quadrant	I	Yes	No
2RC-R94	1	CTMT Bldg. El. 171' 4 1/8" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
2RC-R95	1	CTMT Bldg. El. 171' 4 1/8" NW Quadrant	I	Yes	No
2RC-R98	2	CTMT Bldg. El. 160' 5" NW Quadrant	I	Yes	No
2RC-R117	1	CTMT Bldg. El. 169' 10" NW Quadrant	I	Yes	No
2RC-R123X	1	CTMT Bldg. El. 169' 10" NW Quadrant	I	Yes	No
2RC-R133X	1	CTMT Bldg. El. 169' 10" NW Quadrant	I	Yes	No
2RC-R139	2	CTMT Bldg. El. 167' 10 1/2" NW Quadrant	I	Yes	No
2RC-R129X	2	CTMT Bldg. El. 159' 5" NW Quadrant	I	Yes	No
2RC-R128X	2	CTMT Bldg. El. 151' 9 1/2" NW Quadrant	I	Yes	No
2RC-R127X	2	CTMT Bldg. El. 146' 0" NW Quadrant	I	Yes	No
2RC-R10	2	CTMT Bldg. El. 173' 9" NW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICUL TO REMOVE (Yes or No)
2RC-R141	1	CTMT Bldg. El. 172' 6 5/8" NW Quadrant	I	Yes	No
2RC-R144	1	CTMT Bldg. El. 172' 4 1/8" NW Quadrant	I	Yes	No
2RC-R12	1	CTMT Bldg. El. 171' 4" NW Quadrant	I	Yes	No
2RC-R113	2	CTMT Bldg. El. 159' 4" NW Quadrant	I	Yes	No
2RC-R147	2	CTMT Bldg. El. 167' 10 1/2" NW Quadrant	I	Yes	No
2RC-R136	2	CTMT Bldg. El. 167' 10 1/2" NW Quadrant	I	Yes	No
2RC-R142	1	CTMT Bldg. El. 172' 11 1/2" NW Quadrant	I	Yes	No
2RC-R132X	2	CTMT Bldg. El. 169' 10" NW Quadrant	I	Yes	No
2RC-R124X	2	CTMT Bldg. El. 169' 10" NW Quadrant	I	Yes	No
2RTD-R191	1	CTMT Bldg. El. 127' 1" NE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
2RTD-R190	1	CTMT Bldg. El. 125' 6" NE Quadrant	I	Yes	No
2RTD-R173	1	CTMT Bldg. El. 123' 10" SW Quadrant	I	Yes	No
2RTD-R175	1	CTMT Bldg. El. 123' 10" SW Quadrant	I	Yes	No
2RTD-R172	1	CTMT Bldg. El. 123' 10" SW Quadrant	I	Yes	No
2RTD-R157	1	CTMT Bldg. El. 126' 6" NW Quadrant	I	Yes	Yes
2RTD-R183	1	CTMT Bldg. El. 124' 3" SE Quadrant	I	Yes	No
2RTD-R182	1	CTMT Bldg. El. 124' 3" SE Quadrant	I	Yes	No
2RTD-R187	1	CTMT Bldg. El. 124' 10" NE Quadrant	I	Yes	No
2RTD-R192	1	CTMT Bldg. El. 126' 8" NE Quadrant	I	Yes	No
2RTD-R177	1	CTMT Bldg. El. 126' 6" SE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
2RTD-R180	1	CTMT Bldg. El. 126' 6" SE Quadrant	I	Yes	No
2RTD-R185	1	CTMT Bldg. El. 124' 3" SE Quadrant	I	Yes	No
2RTD-BR9	1	CTMT Bldg. El. 126' 6" SE Quadrant	I	Yes	No
2RTD-BR10	1	CTMT Bldg. El. 124' 3" SE Quadrant	I	Yes	No
2RTD-BR2	1	CTMT Bldg. El. 124' 2" NE Quadrant	I	Yes	No
2RTD-BR4	1	CTMT Bldg. El. 123' 10" SW Quadrant	I	Yes	No
2RTD-BR6	1	CTMT Bldg. El. 124' 10" NE Quadrant	I	Yes	No
2RTD-BR11	1	CTMT Bldg. El. 126' 6" NW Quadrant	I	Yes	Yes

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-11924	2	CTMT Bldg. El. 128' 6 3/16" and 129' 2 11/16", SW Quadrant	I	Yes	No
SS-11933	2	CTMT Bldg. El. 128' 7" and 129' 3 1/2", NW Quadrant	I	Yes	No
SS-11945	2	CTMT Bldg. El. 128' 7 7/8" and 129' 4 3/8", SE Quadrant	I	Yes	No
SS-12536	1	CTMT Bldg. El. 140' 5" NW Quadrant	I	Yes	No
SS-12553	1	CTMT Bldg. El. 154' 1 5/8" NW Quadrant	I	Yes	No
SS-12559	1	CTMT Bldg. El. 162' 1 1/16" NW Quadrant	I	Yes	Yes
SS-12754	1	CTMT Bldg. El. 119' 3" SW Quadrant	I	Yes	No
SS-12316	1	CTMT Bldg. El. 111' 3" NE Quadrant	I	Yes	No
SS-12324	1	CTMT Bldg. El. 109' 1" SE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SAFETY INJECTION					
2SI-BR7	1	CTMT Bldg. El. 114' 9" SW Quadrant	I	Yes	No
2SI-BR9	1	CTMT Bldg. El. 113' 10" SW Quadrant	I	Yes	No
RESIDUAL HEAT REMOVAL					
SS-10319	1	Aux. Bldg. El. 103' 6" Room 2184	A	No	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
STEAM GENERATOR BLOWDOWN					
SS-12793	1	CTMT Bldg. El. 123' 6" SE Quadrant	I	Yes	No
SS-12794	1	CTMT Bldg. El. 122' 6" SE Quadrant	I	Yes	No
SS-12797	1	CTMT Bldg. El. 123' 6" SE Quadrant	I	Yes	No
SS-12798	1	CTMT Bldg. El. 123' 6" SE Quadrant	I	Yes	No
SS-12799	1	CTMT Bldg. El. 128' 1" SE Quadrant	I	Yes	No
SS-12802	1	CTMT Bldg. El. 138' 2 1/4" SE Quadrant	I	Yes	No
SS-12806	2	CTMT Bldg. El. 151' 0" SE Quadrant	I	Yes	No
SS-12827	2	CTMT Bldg. El. 151' 0" SW Quadrant	I	Yes	No
SS-12830	1	CTMT Bldg. El. 139' 0 1/2" SW Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12833	1	CTMT Bldg. El. 125' 3" SW Quadrant	I	Yes	Yes
SS-12834	1	CTMT Bldg. El. 125' 4 1/4" SW Quadrant	I	Yes	Yes
SS-12835	1	CTMT Bldg. El. 128' 6" SW Quadrant	I	Yes	Yes
SS-12848	10	CTMT Bldg. El. 134' 1 5/16" SE Quadrant	I	Yes	No
SS-12862	1	CTMT Bldg. El. 123' 4" SW Quadrant	I	Yes	No
SS-12863	1	CTMT Bldg. El. 126' 3" SW Quadrant	I	Yes	No
SS-12866	1	CTMT Bldg. El. 122' 6" SW Quadrant	I	Yes	Yes
SS-12867	2	CTMT Bldg. El. 131' 8" SE Quadrant	I	Yes	No
SS-12871	1	CTMT Bldg. El. 124' 9" NE Quadrant	I	Yes	No
SS-12872	1	CTMT Bldg. El. 121' 7" NE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12877	1	CTMT Bldg. El. 121' 7" NW Quadrant	I	Yes	No
SS-12878	1	CTMT Bldg. El. 121' 1" NW Quadrant	I	Yes	No
SS-12882	2	CTMT Bldg. El. 134' 0 9/16" NE Quadrant	I	Yes	No
SS-12883	2	CTMT Bldg. El. 134' 4 1/16" NE Quadrant	I	Yes	No
SS-12886	1	CTMT Bldg. El. 151' 0" NE Quadrant	I	Yes	No
SS-12887	1	CTMT Bldg. El. 151' 0" NE Quadrant	I	Yes	No
SS-12888	2	CTMT Bldg. El. 151' 0" NE Quadrant	I	Yes	Yes
SS-12889	1	CTMT Bldg. El. 151' 0" NE Quadrant	I	Yes	Yes
SS-12891	1	CTMT Bldg. El. 150' 0" NE Quadrant	I	Yes	Yes
SS-12896	1	CTMT Bldg. El. 128' 4" NE Quadrant	I	Yes	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-12897	1	CTMT Bldg. El. 128' 4" NE Quadrant	I	Yes	No
SS-12899	1	CTMT Bldg. El. 131' 7 1/16" NE Quadrant	I	Yes	No
SS-12900	2	CTMT Bldg. El. 144' 0" NE Quadrant	I	Yes	Yes
SS-12906	1	CTMT Bldg. El. 106' 0 1/4" SW Quadrant	I	Yes	No
SS-12940	1	CTMT Bldg. El. 127' 4" SW Quadrant	I	Yes	No
SS-12942	2	CTMT Bldg. El. 127' 4" SW Quadrant	I	Yes	Yes
SS-12944	3	CTMT Bldg. El. 127' 4" SW Quadrant	I	Yes	Yes
SS-12946	1	CTMT Bldg. El. 127' 4" SW Quadrant	I	Yes	No
SS-12951	3	CTMT Bldg. El. 128' 4 1/2" SW Quadrant	I	Yes	Yes
SS-13536	3	Aux. Bldg. El. 134' 9 1/4" 135' 0", Room 2237	A	No	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
SS-13538	3	Aux. Bldg. El. 130' 9" Room 2237	A	No	No
SS-13546	3	Aux. Bldg. El. 134' 6" Room 2188	A	No	No
SS-13810	1	Aux. Bldg. El. 136' 3" Room 2608	A	No	No
SS-13812	1	Aux. Bldg. El. 130' 9 1/2" Room 2608	A	No	No
SS-13819	1	Aux. Bldg. El. 135' 2 1/4" Room 2223	A	Yes	No
SS-13826	3	Aux. Bldg. El. 133' 0" Room 2223	A	Yes	No
SS-15064	1	Aux. Bldg. El. 132' 10 5/8" Room 2609	A	No	No
SS-15065	1	Aux. Bldg. El. 132' 10 5/8" Room 2609	A	No	No
SS-15066	1	Aux. Bldg. El. 132' 10 5/8" Room 2609	A	No	No
SS-15067	1	Aux. Bldg. El. 132' 5 3/8" Room 2609	A	No	No

TABLE 3.7-4b

SAFETY RELATED MECHANICAL SNUBBERS*

HANGER NUMBER	NUMBER OF SNUBBERS	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE DURING SHUTDOWN** (Yes or No)	ESPECIALLY DIFFICUL TO REMOVE (Yes or No)
SS-15068	1	Aux. Bldg. El. 132' 5 3/8" Room 2609	A	No	No
SS-15069	1	Aux. Bldg. El. 132' 5 3/8" Room 2609	A	No	No

* Snubbers may be added to safety related systems without prior License Amendment to Table 3.7-4b provided that a revision to Table 3.7-4b is included with the next License Amendment request.

** Modifications to this column due to changes in high radiation areas may be made without prior License Amendment provided that a revision to Table 3.7-4b is included with the next License Amendment request.

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
evice Number nd Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
1. 4160VAC Switchgears (NOTE: Response includes relay initiation time & breaker clearing time.)						
DA04	10560	.09/5.4	DA01	18480	.39/9.2	Reactor Coolant Pump 2A
DB03	10560	.09/5.4	DB01	16500	.39/9.2	Reactor Coolant Pump 2B
DC03	10560	.09/5.4	DC04	15310	.39/9.2	Reactor Coolant Pump 2C
2. 600VAC Load Centers						
EA04	2750	.18/11	EPPC-2A CP-1	MSCP Type X	N/A	Reactor Polar Crane
EA10	1980	.10/6	EPPC-2A CP-2	MSCP Type X	N/A	Containment Cooler 2A (Normal)
EB05	1980	.10/6	EPPC-2A CP-6	MSCP Type X	N/A	Containment Cooler 2B (Normal)
EB06	1980	.10/6	EPPC-2E CP-2	MSCP Type X	N/A	Containment Cooler 2C (Normal)
EC12	1980	.10/6	EPPC-2D CP-1	MSCP Type X	N/A	Containment Cooler 2D (Normal)
ED11	1320	.10/6	EPPC-2A CP-3	MSCP Type X	N/A	CRDM Cooler Fan 2A
ED15	1650	.10/6	EPPC-2A CP-4	MSCP Type X	N/A	Containment Cooler 2A (Emergency)
ED16	1650	.10/6	EPPC-2A CP-5	MSCP Type X	N/A	Containment Cooler 2B (Emergency)
EE08	1650	.10/6	EPPC-2D CP-2	MSCP Type X	N/A	Containment Cooler 2C (Emergency)
EE13	1320	.10/6	EPPC-2D CP-3	MSCP Type X	N/A	CRDM Cooler Fan 2B
EE16	1650	.10/6	EPPC-2D CP-4	MSCP Type X	N/A	Containment Cooler 2D (Emergency)
3. 600VAC Motor Control Centers						
FA-F7	231	.012/.72	EPPC-2B CP-1	MSCP Type S	N/A	Reactor Cavity Clg Fan Mtr.
FA-I6	11	.012/.72	EPPC-2B CP-2	MSCP Type S	N/A	Reactor Cavity Cool Fan Mov
FA-I5	116	.012/.72	EPPC-2B CP-3	MSCP Type S	N/A	CTMT Post LOCA Air Mixing Fan 2D
FA-J5	116	.012/.72	EPPC-2B CP-4	MSCP Type S	N/A	CTMT Post LOCA Air Mixing Fan 2C

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **				
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location		Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FB-I3	116	.012/.72	EPPC-2F	CP-1	MSCP Type S	N/A	CTMT Post LOCA Air Mixing Fan 2B
FB-I4	116	.012/.72	EPPC-2F	CP-2	MSCP Type S	N/A	CTMT Post LOCA Air Mixing Fan 2A
FD-H7R	770	.012/.72	EPPC-2G	CP-1	MSCP Type S	N/A	CTMT GIB Crane (N2T31K005-N)
FB-J7	231	.012/.72	EPPC-2F	CP-3	MSCP Type S	N/A	Reactor Cavity Clg Fan Mtr.
FB-A4R	770	.012/.72	EPPC-2F	CP-4	MSCP Type S	N/A	CTMT Elevator No. 3 Control
FC-P3	116	.012/.72	EPPC-2C	CP-1/2	MSCP Type S	N/A	CTMT Dome Recirc. Fan 2A
FC-P4	116	.012/.72	EPPC-2C	CP-3/4	MSCP Type S	N/A	CTMT Dome Recirc. Fan 2B
FC-I2*	770	.012/.72	-------	------	----------	---	RCP Motor Space Heaters
FC-I4	138	.012/.72	EPPC-2C	CP-5	MSCP Type S	N/A	RCP BRG Oil Lift Pump
FC-N3	138	.012/.72	EPPC-2C	CP-6	MSCP Type S	N/A	RCP BRG Oil Lift Pump
FC-J3*	232	.012/.72	-------	------	----------	---	Refueling Wtr Surface Supply
FC-M5*	693	.012/.72	-------	------	----------	---	Refueling Wtr Surface Exhaust
FC-J5	363	.012/.72	EPPC-2C	CP-7	MSCP Type S	N/A	CTMT Pre-Access Fan Motors
FC-N4*	770	.012/.72	-------	------	----------	---	RCP Mtr Space Heaters 2C
FC-J6L#	1100	.012/.72	-------	------	----------	---	Receptacles Term. Box 2A
FC-J6R*	770	.012/.72	-------	------	----------	---	Reactor Cavity Filter Pmp Recep.
FC-S3L*	770	.012/.72	-------	------	----------	---	Up Ending Frame Winch Mtr
FC-M4L	770	.012/.72	EPPC-2C	CP-8	MSCP Type S	N/A	CTMT GIB Crane (N2T31K004-N)
FC-N2L*	770	.012/.72	-------	------	----------	---	Reactor Cavity Manipulator Crane
FC-S3R	770	.012/.72	EPPC-2C	CP-9	MSCP Type S	N/A	CTMT GIB Crane (N2T31K006-N)
FC-C5R*	770	.012/.72	-------	------	----------	---	SW Port Drain Pump Recept.
FD-D6	138	.012/.72	EPPC-2G	CP-2	MSCP Type S	N/A	RCP BRG Oil Lift Pump
FD-E3	116	.012/.72	EPPC-2G	CP-3/4	MSCP Type S	N/A	CTMT Dome Recirculation Fan 2D
FD-B4	363	.012/.72	EPPC-2G	CP-5	MSCP Type S	N/A	Reactor Cool Drain Tank Pump 2B
FD-C2	138	.012/.72	EPPC-2G	CP-6	MSCP Type S	N/A	CTMT Sump Pump Mtr 2A
FD-D2	138	.012/.72	EPPC-2G	CP-7	MSCP Type S	N/A	CTMT Sump Pump Mtr 2B
FD-C4	363	.012/.72	EPPC-2G	CP-8	MSCP Type S	N/A	CTMT Pre-Access Fan Mtrs
FD-G3*	770	.012/.72	-------	----	----------	---	RCP Mtr Space Heaters 2B
FD-A3L#	1100	.012/.72	-------	----	----------	---	Receptacles Term Box 2C

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **				
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location		Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FE-A6	363	.012/.72	EPPC-2G	CP-9	MSCP Type S	N/A	Reactor Cool Drain Tank Pump 2A
			-------	----	----------	---	Receptacles Term Box 2B
FE-A4L#	1100	.012/.72	EPPC-2G	CP-10	MSCP Type S	N/A	Incore Det. Drive & Cont. Pnl.
FE-C3L	1100	.012/.72	EPPC-2G	CP-11/12	MSCP Type S	N/A	CTMT Dome Recirc. Fan 2C
FE-H5	116	.012/.72	EPPC-2B	CP-5	MSCP Type S	N/A	RHR Pumps Inlet Mov
FU-G2	32	.012/.72	EPPC-2B	CP-6	MSCP Type S	N/A	CTMT Air Cooling Fan Mov
FU-H2	13	.012/.72	EPPC-2B	CP-7	MSCP Type S	N/A	CTMT Air Cooling Fan Mov
FU-H3	13	.012/.72	EPPC-2B	CP-8	MSCP Type S	N/A	RCP Motor Cooler Disch Mov
FU-H4	11	.012/.72	EPPC-2B	CP-9	MSCP Type S	N/A	CTMT To Atmos Diff Press Mov
FU-J4	11	.012/.72	EPPC-2B	CP-10	MSCP Type S	N/A	Pressurizer to Relief Tank MOV
FU-K4	25	.012/.72	EPPC-2B	CP-11	MSCP Type S	N/A	CTMT Cooler Disch MOV
FU-K6	11	.012/.72	EPPC-2B	CP-12	MSCP Type S	N/A	Post ACDT Air Sampler From CTMT Mov
FU-L4	13	.012/.72	EPPC-2B	CP-13	MSCP Type S	N/A	Post ACDT Air Sampler From CTMT Mov
FU-L5	13	.012/.72	EPPC-2B	CP-14	MSCP Type S	N/A	RCP Seal Water Return Isol.
FU-T4	25	.012/.72	EPPC-2B	CP-15	MSCP Type S	N/A	Post ACDT Air Sampler Return Mov
FU-M4	13	.012/.72	EPPC-2B	CP-16	MSCP Type S	N/A	CTMT Air Sampler Mov.
FU-R5	18	.012/.72	EPPC-2B	CP-17	MSCP Type S	N/A	CRDM Cool Fan Damprs Mov.
FU-V4	13	.012/.72	EPPC-2B	CP-18	MSCP Type S	N/A	CTMT Air Cooler Disch Mov.
FU-W2	18	.012/.72	EPPC-2B	CP-19	MSCP Type S	N/A	Reactor Cavity H_2 Dilution Fan VLV 2A
FU-W4	32	.012/.72	EPPC-2B	CP-20	MSCP Type S	N/A	RHR System Inlet Isol. Vlv.
FU-T5	50	.012/.72	Q2R18B032-A		1100	.012/.72	Accumulator 2A Disch. Vlv.
FU-Z2	523	.012/.72	Q2R18B031-A		1100	.012/.72	Accumulator 2C Disch. Vlv.
FU-Z3	523	.012/.72	EPPC-2F	CP-5	MSCP Type S	N/A	Post ACDT Air Sampler Return Mov.
FV-M3	13	.012/.72	EPPC-2F	CP-6	MSCP Type S	N/A	Post ACDT Air Sampler From CTMT Mov
FV-H4	13	.012/.72	EPPC-2F	CP-7	MSCP Type S	N/A	Post ACDT Air Sampler From CTMT Mov
FV-H5	13	.012/.72					

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FV-Y4	13	.012/.72	EPPC-2F CP-8	MSCP Type S	N/A	Post LOCA CTMT Vent Mov
FV-Y5	32	.012/.72	EPPC-2F CP-9	MSCP Type S	N/A	Instr. Air Line Disch. Mov.
FV-I2	13	.012/.72	EPPC-2F CP-10	MSCP Type S	N/A	CRDM Cool Fan Damper
FV-J4	18	.012/.72	EPPC-2F CP-11	MSCP Type S	N/A	CTMT Air Cooler Disch. Mov.
FV-J5	18	.012/.72	EPPC-2F CP-12	MSCP Type S	N/A	CTMT Air Cooler Disch. Mov.
FV-N2	32	.012/.72	EPPC-2F CP-13	MSCP Type S	N/A	Reac. Cavity H_2 Dilution Fan Vlv. 2B
FV-S2	523	.012/.72	Q2R18B035-B	1100	.012/.72	Accumulator 1B Disch. Vlv.
FV-V3	50	.012/.72	EPPC-2F CP-14	MSCP Type S	N/A	RHR System Inlet Isol. Vlv.
FV-W4	25	.012/.72	EPPC-2F CP-15	MSCP Type S	N/A	Pressurizer to Relief Isol. Mov.
FV-V2	50	.012/.72	EPPC-2F CP-16	MSCP Type S	N/A	RHR System Outlet Isol. Vlv.
FV-C3	25	.012/.72	EPPC-2F CP-17	MSCP Type S	N/A	RCP CCW Return from Oil Clr
FV-F2	13	.012/.72	EPPC-2F CP-18	MSCP Type S	N/A	CTMT Air Cooling Fan Mov.
FV-F3	13	.012/.72	EPPC-2F CP-19	MSCP Type S	N/A	CTMT Air Cooling Fan MOV.
FB-02	50	.012/.72	EPPC-2F CP-21	MSCP Type S	N/A	Reactor Cav Cooling Fan MOV.
4. 208 VAC Motor Control Centers						
HA-03	116	.012/.72	EPPC-2B CP-23	MSCP Type N	N/A	Reac. Cavity H_2 Dilution Fan 2A
HB-N7	116	.012/.72	EPPC-2F CP-23	MSCP Type N	N/A	Reac. Cavity H_2 Dilution Fan 2B
HB-L7R/HD-N6L	1100	.012/.72	Rod Pos. Ind (40ABKR) Distr. Pnl.	2000	.015/.9	Digital Rod Position Control and Indication
5. 600VAC Pressurizer Distr. Pnl 2A Circuit Bkrs.						
BKR #1	1760	.016/1	EA-11	3300	.18/11	Pressurizer Htr Group 2A Terminal Box N2TB010
BKR #2	1760	.016/1				
BKR #3	1760	.016/1				
BKR #4	1760	.016/1				
BKR #5	1760	.016/1				

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
6. 600VAC Pressurizer Distr. Pnl 2B Circuit Bkrs.						
BKR #1	1760	.016/1	EC-11	3300	.18/11	Pressurizer Htr Group 2B Terminal Box N2TB011
BKR #2	1760	.016/1				
BKR #3	1760	.016/1				
BKR #4	1760	.016/1				
BKR #5	1760	.016/1				
7. 600VAC Pressurizer Htr. Distr. Pnl 2C Circuit Bkrs.						
BKR #1	1540	.018/1.1	EM-04	4400	.18/11	Pressurizer Htr Group 2C Terminal Box N2TB008
BKR #2	1540	.018/1.1				
BKR #3	1540	.018/1.1				
BKR #4	1540	.018/1.1				
BKR #4	1540	.018/1.1				
BKR #5	1540	.018/1.1				
BKR #6	1540	.018/1.1				
BKR #7	1540	.018/1.1				
8. 600VAC Pressurizer Htr. Distr. Pnl 2D Circuit Bkrs.						
BKR #1	1540	.018/1.1	EM-05	3300	.18/11	Pressurizer Htr Group 2D Terminal Box N2TB007
BKR #2	1540	.018/1.1				
BKR #3	1540	.018/1.1				
BKR #4	1540	.108/1.1				

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
9. 600VAC Pressurizer HTR. Distr. Pnl 2E Circuit Bkrs.						
BKR #1	1540	.018/1.1	EN-07 (Unit 1)	3300	.18/11	Pressurizer Htr Group 2E Terminal Box N2TB009
BKR #2	1540	.018/1.1				
BKR #3	1540	.018/1.1				
BKR #4	1540	.018/1.1				
BKR #5	1540	.018/1.1				
10. 125VDC Sol. Vlvs. Power Fuses						
FB1 (TC-05A)	3	N/A	DC Dist Pnl 2A CKT #11	770	.012/.72	PRZR PWR Relief VLV (4454) 2A
FB1 (TC-25A)	3	N/A	DC Dist Pnl 2D CKT #7	770	.012/.72	PRZR PWR Relief VLV (444B) 2B
FB5 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	Letdown Line Isol. Vlv. (459)
FB6 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	Letdown Line Isol. Vlv. (460)
FB5 (TC-05A)	3	N/A	DC Dist Pnl 2A CKT #11	770	.012/.72	Reac. Cool Drn Tank Pump Disch. Vlv (100)
FB6 (TC-05A)	3	N/A	DC Dist Pnl 2A CKT #11	770	.012/.72	Reac. Cool Drn. Tank Vent Isol. Vlv. (712)
FB3 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	RMW to RCP Standpipe Fill (8168C)
FB4 (TC-25B)	3	N/A	DC Dist Pnl 2D CKT #7	770	.012/.72	PRZR Rel. Tnk to RMW Isol. Vlv. (8030)
FB5 (TC-25B)	3	N/A	DC Dist Pnl 2D CKT #7	770	.012/.72	PRZR Rel. Tnk Drn to WPS Drn. Tnk (8030)
FB6 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	Excess Letdown Isol. Vlv. (8153)
FB5 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #18	770	.012/.72	RCS PRZR Aux. Spray Vlv. (8145)
FB7 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	Excess Letdown Isol. Vlv. (8154)

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FB2 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	RMW to RCP Standpipe Fill (8168A)
FB3 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	RMW to RCP Standpipe Fill (8168B)
FB2 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. N_2 Supply & Vent Isol. (8875A)
FB6 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. N_2 Supply & Vent Isol. (8875C)
FB4 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. Line Test Isol. (8877A)
FB8 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. Line Test Isol. (8877C)
FB3 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. Fill Line Isol. (8878A)
FB7 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum Fill Line Isol (8878C)
FB5 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. Inject Test Line Isol. (8879S)
FB9 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. Inject. Test Line Isol. (8879C)
FB2 (TC-29B)	3	N/A	DC Dist Pnl 2D CKT #9	770	.012/.72	Accum. N_2 Supply & Vent Isol (8875B)
FB4 (TC-29B)	3	N/A	DC Dist Pnl 2D CKT #9	770	.012/.72	Accum. Test Line Isol. (8877B)
FB3 (TC-29B)	3	N/A	DC Dist Pnl 2D CKT #9	770	.012/.72	Accum. Fill Line Isol. (8878B)
FB5 (TC-29B)	3	N/A	DC Dist Pnl 2D CKT #9	770	.012/.72	Accum. Inject. Test Line Isol (8879B)
FB1 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	RCP Seal Leak Off Isol (1841A)
FB1 (TC-29B)	3	N/A	DC Dist Pnl 2D CKT #8	770	.012/.72	Damper Sol. Vlvs. CTMT Purge Isol (3196)
FB9 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	Letdown Orifice Isol. Vlv. (8149B)

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FB2 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	RCP Seal Leak Off Isol. (8141C)
FB1 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	RCP Seal Leak Off Isol. (8141B)
FB1 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #18	770	.012/.72	RCS Alternate Charging Line (8147)
FB1 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #14	770	.012/.72	RCS Normal Charging Line (8146)
FB7 (TC-25B)	3	N/A	DC Dist Pnl 2D CKT #7	770	.012/.72	Reac. Vessel Leak Off Isol. (8032)
FB2 (TC-25B)	3	N/A	DC Dist Pnl 2D CKT #7	770	.012/.72	PRZR Rel. Tnk to RMW Supply Isol (8047)
FB8 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	RCP Seals Wtr By-pass Isol. Vlv. (8142)
FB5 (TC-27B)	3	N/A	DC Dist Pnl 2D CKT #15	770	.012/.72	Excess L'Down to VCT or RC DrnTk (8143)
FB10 (TC-06a)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	Letdown Orifice Isol. Vlv. (8149A)
FB8 (TC-06A)	3	N/A	DC Dist Pnl 2A CKT #17	770	.012/.72	Letdown Orifice Isol. Vlv. (8149C)
FB1 (TC-08A)	3	N/A	DC Dist Pnl 2A CKT #13	770	.012/.72	Accum. Test Line Isol. Vlv. (8871)
FB4 (TC-31B)	3	N/A	DC Dist Pnl 2D CKT #12	770	.012/.72	RCP Comp. Cool (3184)
FB1 (TC-09A)	3	N/A	DC Dist Pnl 2A CKT #6	770	.012/.72	Excess Letdown Hx Cool Disch. (3443)
FAN (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2A Blowdown (3179C)
FAM (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2B Blowdown (3180C)
FAL (NBL2707B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2C Blowdown (3181C)
FAC (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2A Blowdown (3951B)
FAB (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2B Blowdown (3952B)
FAA (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2C Blowdown (3953B)
FAD (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	CVCS Letdown Line Vlv. (3950B)
FD (NBL2702A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	CVCS Letdown Line Vlv. (3950A)

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
evice Number nd Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FC (NBL2702A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	SG2A Blowdown (3951A)
FB (NBL2702A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	SG2B Blowdown (3952A)
FA (NBL2702A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	SG2C Blowdown (3953A)
FK (NBL2702A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	SG2A Blowdown (7697A)
FJ (NBL2702A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	SG2B Blowdown (7698A)
FH (NBL2707A-A)	3	N/A	DC Dist Pnl 2B CKT #5	770	.012/.72	SG2C Blowdown (7699A)
FAK (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2A Blowdown (7697B)
FAJ (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2B Blowdown (7698B)
FAH (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	SG2C Blowdown (7699B)
FAS (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	Press. Stm Space Sampler (3880)
FAR (NBL2702B-B)	3	N/A	DC Dist Pnl 2E CKT #5	770	.012/.72	Press. Liq Space Sampler (3881)
F/3766(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	Accumulator Sampler (3766)
F/3179A(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	SG2A Blowdown Sampler (3179A)
F/3179B(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	SG2A Blowdown Sampler (3179B)
F/3180A(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	SG2B Blowdown Sampler (3180A)
F/3180B(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	SG2B Blowdown Sampler (3180B)
F/3181A(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	SG2C Blowdown Sampler (3818A)
F/3181B(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	SG2C Blowdown Sampler (3181B)
F/3162(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	Accum. Tank 2A Sampler (3162)
F/3163(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	Accum. Tank 2B Sampler (3163)
F/3164(NFSS2607A-A)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	Accum. Tank 2C Sampler (3164)
F/3101(NFSS2607B-B)	3	N/A	DC Dist Pnl 2F CKT #10	770	.012/.72	Reac. Coolant Hot Leg (3101)
F/3102(NFSS2607B-B)	3	N/A	DC Dist Pnl 2F CKT #10	770	.012/.72	Reac. Coolant Hot Leg (3102)
FA(NGB25040)	3	N/A	DC Dist Pnl 2D CKT #16	770	.012/.72	CTMT Sump Disch. (3376)
FA(NGB25040)	3	N/A	DC Dist Pnl 2G CKT #12	770	.012/.72	CTMT Cooler Drains (3395A)
FD(NGB25040)	3	N/A	DC Dist Pnl 2G CKT #12	770	.012/.72	CTMT Cooler Drains (3395B)
FC(NGB25040)	3	N/A	DC Dist Pnl 2G CKT #12	770	.012/.72	CTMT Cooler Drains (3395C)
FB(NGB25040)	3	N/A	DC Dist Pnl 2G CKT #12	770	.012/.72	CTMT Cooler Drains (3395D)
F/3103(NFSS2607B-B)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	PRZR Liquid Sampler (3103)
F/3104(NFSS2607B-B)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	PRZR Liquid Sampler (3104)
F/3765(NFSS2607B-B)	3	N/A	DC Dist Pnl 2C CKT #6	770	.012/.72	Reac. Hot Leg Sampler (3765)

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
1. 120VAC Sol. Vlvs. Power Fuses						
FM(NGB2504M)	3	N/A	AC Dist Pnl 2J CKT #2	3000	.016/1	Reac. Cavity Cooling (3999A)
FF(NGB25040)	3	N/A	AC Dist Pnl 2K CKT #2	3000	.016/1	Reac. Cavity Cooling (3999B)
2. Variable D.C. Voltage CRDM Fuses (125 V Max)						
FU13/A22	10	N/A	RC Power Cab FU1/2/3	30	N/A	Mechanism #1 Sta. Gripper Group A
FU14/A22	10	N/A	RC Power Cab FU1/2/3	30	N/A	Mechanism #2 Sta. Gripper Group A
FU15/A22	10	N/A	RC Power Cab FU1/2/3	30	N/A	Mechanism #3 Sta. Gripper Group A
FU16/A22	10	N/A	RC Power Cab FU1/2/3	30	N/A	Mechanism #4 Sta. Gripper Group A
FU25/A23	10	N/A	RC Power Cab FU4/5/6	30	N/A	Mechanism #1 Sta. Gripper Group B
FU26/A23	10	N/A	RC power Cab FU4/5/6	30	N/A	Mechanism #2 Sta. Gripper Group B
FU27/A23	10	N/A	RC Power Cab FU4/5/6	30	N/A	Mechanism #3 Sta. Gripper Group B
FU28/A23	10	N/A	RC Power Cab FU4/5/6	30	N/A	Mechanism #4 Sta. Gripper Group B
FU41/A24	10	N/A	RC Power Cab FU7/8/9	30	N/A	Mechanism #1 Sta. Gripper Group C
FU42/A24	10	N/A	RC Power Cab FU7/8/9	30	N/A	Mechanism #2 Sta. Gripper Group C
FU43/A24	10	N/A	RC Power Cab FU7/8/9	30	N/A	Mechanism #3 Sta. Gripper Group C
FU44/A24	10	N/A	RC Power Cab FU7/8/9	30	N/A	Mechanism #4 Sta. Gripper Group C

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
Device Number and Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
FU1/A51	50	N/A	Fusible Disconnect Bus Duct Plug-In Unit A-101	150	N/A	Mechanism #1 Lift Group A
FU2/A51	50	N/A		150	N/A	Mechanism #2 Lift Group A
FU1/A52	50	N/A		150	N/A	Mechanism #3 Lift Group A
FU2/A52	50	N/A		150	N/A	Mechanism #4 Lift Group A
FU1/A53	50	N/A		150	N/A	Mechanism #1 Lift Group B
FU2/A53	50	N/A		150	N/A	Mechanism #2 Lift Group B
FU1/A54	50	N/A		150	N/A	Mechanism #3 List Group B
FU2/A54	50	N/A		150	N/A	Mechanism #4 List Group B
FU1/A55	50	N/A		150	N/A	Mechanism #1 Lift Group C
FU2/A55	50	N/A		150	N/A	Mechanism #2 Lift Group C
FU1/A56	50	N/A		150	N/A	Mechanism #3 Lift Group C
FU2/A56	50	N/A		150	N/A	Mechanism #4 Lift Group C
FU21/A25	10	N/A	Fusible Disconnect Bus Duct Plug-In Unit A-102	30	N/A	Mechanism #1 Moving Gripper Group A
FU22/A25	10	N/A		30	N/A	Mechanism #2 Moving Gripper Group A
FU23/A25	10	N/A		30	N/A	Mechanism #3 Moving Gripper Group A
FU24/A25	10	N/A		30	N/A	Mechanism #4 Moving Gripper Group A
FU33/A26	10	N/A		30	N/A	Mechanism #1 Moving Gripper Group B
FU34/A26	10	N/A		30	N/A	Mechanism #2 Moving Gripper Group B
FU35/A26	10	N/A		30	N/A	Mechanism #3 Moving Gripper Group B
FU36/A26	10	N/A		30	N/A	Mechanism #4 Moving Gripper Group B
FU49/A27	10	N/A		30	N/A	Mechanism #1 Moving Gripper Group C
FU50/A27	10	N/A		30	N/A	Mechanism #2 Moving Gripper Group C
FU51/A27	10	N/A		30	N/A	Mechanism #3 Moving Gripper Group C
FU52/A27	10	N/A		30	N/A	Mechanism #4 Moving Gripper Group C

TABLE 3.8-1

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

PRIMARY PROTECTION			BACKUP PROTECTION **			
evice Number nd Location	Trip Setpoint (Ampere)	Response Time (Sec/Cycles)	Device Number and Location	Trip set Point (Ampere)	Response Time (Sec/Cycles)	System Powered
3. 480/277 VAC Lighting Cables						
LCP-2R N2T51L003A-N	825	.012/.72	EB09	3300	.1/6	Lighting Panel 2R(N2T51L001A)
LCP-2O N2T51L003D-N	825	.012/.72	EB09	3300	.1/6	Lighting Panel 2O(N2T51L001D)
LCP-2Q N2T51L003B-N	825	.012/.72	EC13	3300	.1/6	Lighting Panel 2Q(N2T51L001B)
LCP-2P N2T51L003C-N	825	.012/.72	EC13	3300	.1/6	Lighting Panel 2P(N2T51L001C)
FE-C3R#	1100	.012/.72	----	----	----	Receptacle Panel 2F(N2T51L002A-N)
14. 480 VAC, 3Ø, H_2 Recombiner Power Supply						
FAL3L	1100	.012/.72	ED10	6600	.18/11	H_2 Recombiner HTRS (Q2E17G001A-A)
FB-H6R	1100	.012/.72	EE10	9900	.18/11	H_2 Recombiner HTRS (Q2E17G001B-B)

* Not required in modes 1-4
\# May be energized under administrative control when required for maintenance.
** This portion of the table is not valid until after the second refueling outage except for the backup protection devices that have been installed prior to startup following the first refueling outage.

The maximum peak pressure expected to be obtained from a LOCA event is 45 psig. The limit of 3 psig for initial positive containment pressure will limit the total pressure to 48 psig which is less than design pressure and is consistent with the accident analyses.

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the accident analysis for a LOCA or steam line break accident.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the maximum pressure of 48 psig in the event of a LOCA. The visual examination of tendons, anchorages and exposed interior and exterior surfaces of the containment, and the Type A leakage test, along with the data obtained from Unit 1 tendon surveillance, is sufficient to demonstrate this capability.

The surveillance requirements for demonstrating the containment's structural integrity are in compliance with the recommendations of paragraph C.1.3 of Regulatory Guide 1.35 "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures," January 1976.

3/4.6.1.7 CONTAINMENT VENTILATION SYSTEM

The 48-inch containment purge supply and exhaust isolation valves are required to be closed in modes above cold shutdown since these valves have not been demonstrated capable of closing during a LOCA or steam line break accident. Maintaining these valves closed during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system.

The use of the containment purge lines is restricted to the 8-inch vent supply and exhaust isolation valves to ensure that the site boundary dose guidelines of 10 CFR Part 100 would not be exceeded in the event of a loss-of-coolant accident during venting operations.

Safety related reasons for venting containment during operation (Modes 1, 2, 3 and 4) includes controlling containment pressure and reducing airborne radioactivity.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 34 TO FACILITY OPERATING LICENSE NO. NPF-8

ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 2

DOCKET NO. 50-364

INTRODUCTION

Alabama Power Company (APCo) letter dated November 24, 1982, supplemented March 23, 1984, submitted proposed changes to the Joseph M. Farley Nuclear Plant, Unit 2 Technical Specifications. Specifically, the proposed changes are:

1) Addition of a list of containment penetration overcurrent protection devices as Table 3.8-1 in accordance with license condition 2.C.(19)(b).

2) Changing the description of the replaced 18" mini-purge valves to 8" containment vent valves, in accordance with license condition 2.C.(17).

3) Addition of a list of safety-related mechnical snubbers into Table 3.7-4b in accordance with the note requiring the addition following the first refueling outage.

DISCUSSION AND EVALUATION

We have reviewed the APCo submittals, noted above, as follows:

1. Overcurrent Protection Devices

The proposed amendment lists in Table 3.8-1 of the Technical Specifications the modification of circuit protection devices in the containment penetration circuits. The modifications were approved in the NRC Safety Evaluation Report, Supplement No. 5, dated March 1981. The proposed change updates Table 3.8-1, Containment Penetration Conductor Overcurrent Protective Devices, to include all installed protection devices.

Some changes to the approved containment penetration circuits were made and are shown in the proposed Technical Specification. Specifically, the changes involve the addition or changes to backup protection to the primary protection for various circuits, and changes to the primary protection trip setpoints and response times.

The changes are considered administrative in nature, not affecting the licensing requirements or the previously approved NRC Safety Evaluation

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Report. Based on our review, the intent of license condition 2.C.(19)(b) has been met by the licensee, and the Technical Specification changes are acceptable.

2. Containment Ventilation System 8" Valve

License condition 2.C.(17) required installation of a modified containment vent and purge system prior to startup following the first refueling. The licensee has modified the system by replacing the 18" mini-purge valves with 8" valves as described in letters dated September 30 and October 30, 1981. The NRC staff review of the design resulted in several discussions with the licensee's staff and supplemental letters from APCo dated December 20, 1983 and March 23, 1984.

The licensee continues to state that the system, as designed, requires continuous venting of the containment to the outside atmosphere through the 8" lines to limit containment pressure. Based on this continuous vent mode of operation, Technical Specifications for periodic leakage rate testing of the valves has not been proposed by APCo. The licensee's basis for the continuous operation of the vent system is to purge the containment of contaminants to ensure ready entry to the containment building. Also, the licensee contends that the modified design complies with the requirements of NRC's Branch Technical Position CSB 6-4 Containment Purging During Normal Plant Operations. However, the intent of CSB 6-4 is that plant designs should not rely on the use of containment purge and vent systems on a routine, continuous basis. The position also states that provisions should be made for testing the leakage rate of the isolation valves during reactor operations. We are continuing our review of the design and operation of the system. The need for continuous purging and venting is still considered an open issue for the Farley Plant pending agreement on a "goal" for purging as identified to APCo in our letter dated August 5, 1981, Enclosure 2, and on Technical Specifications for leakage tests of valves with resident seals and actions when the 8" valves are inoperable.

The proposed Technical Specifications provided by the licensee's letter dated November 24, 1982, supplemented March 23, 1984, are acceptable as needed administrative changes. The changes correct the vent valve size to agree with the existing valve size. Other minor changes meet NRC guidance to clarify that the inoperable 48" valve is sealed closed (NUREG-0737 Item II.E.4.2.6) and that the 8" vent is used only for safety related reasons. The intent of license condition 2.C.(17) has been met by the licensee since the 18" system has been replaced by the 8" system whose design we are reviewing under separate action.

3. Listing of Safety-Related Mechanical Snubbers

The note shown on Table 3.7-4b of the Technical Specifications contains a requirement that a list of safety-related mechanical snubbers be provided prior to startup following the first refueling outage. The proposed change

simply adds the list of mechanical snubbers to Table 3.7-4b. We have reviewed the Table 3.7-4b listing of snubbers and find the tabulated data to be acceptable.

SUMMARY

Our review, based on the discussion and evaluation noted above, concludes that the licensee's proposed Technical Specification changes meet the intent of license conditions 2.C.(17) and 2.C.(19)(b), and the notation of specification Table 3.7-4b, and are acceptable as administrative changes made to comply with Commission guidance.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: May 17, 1984

Principal Contributors:

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