

Final Submittal
(Blue Paper)

HATCH OCTOBER/NOVEMBER 2005 EXAM

05000321/2005301 & 05000366/2005301

**OCTOBER 28, 2005, (WRITTEN) AND
OCTOBER 31 - NOVEMBER 4, 2005**

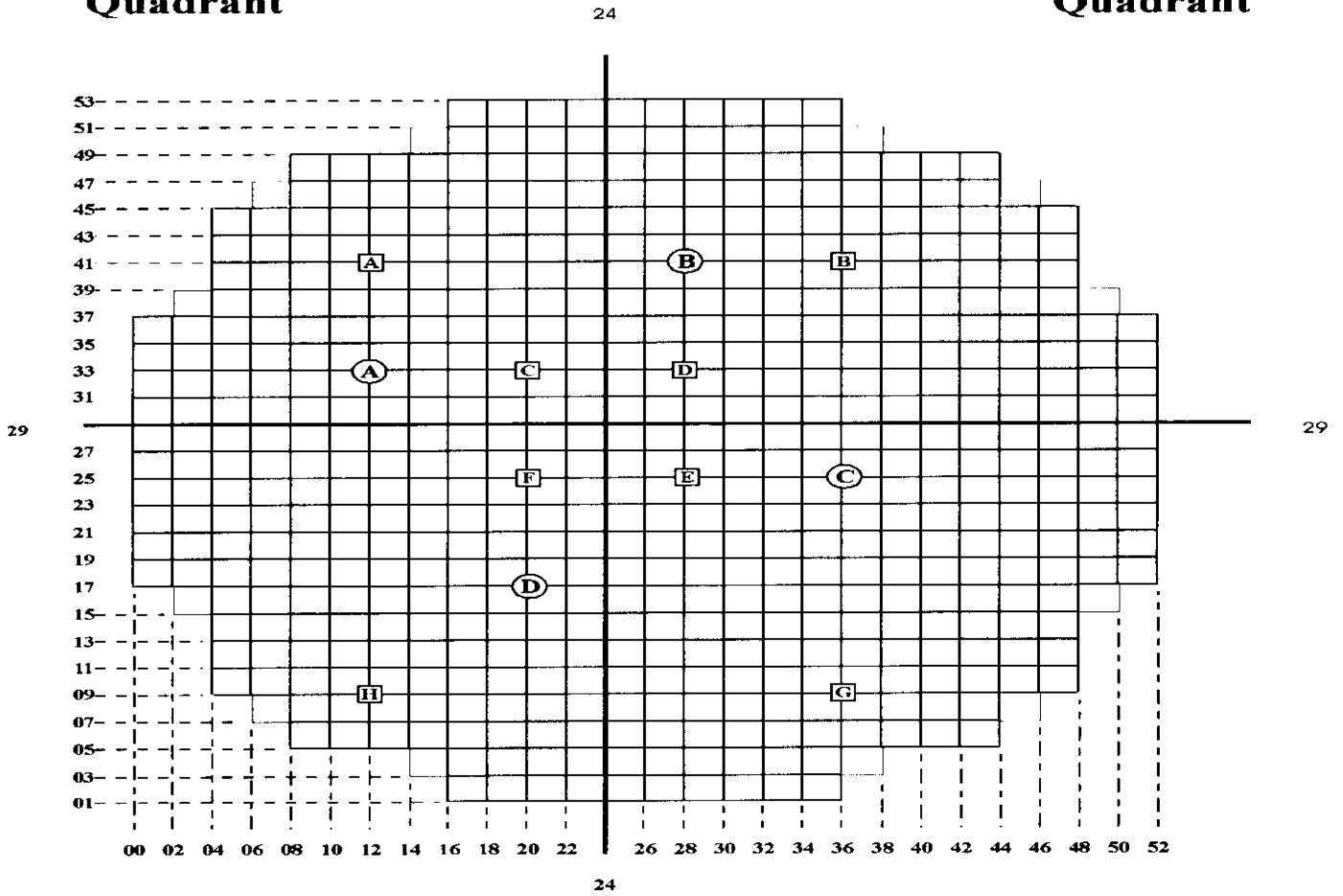
**FINAL RO/SRO WRITTEN
EXAMINATION REFERENCES**

NORTH
←

HATCH UNIT 2

**Northeast
Quadrant**

**Southeast
Quadrant**



**Northwest
Quadrant**

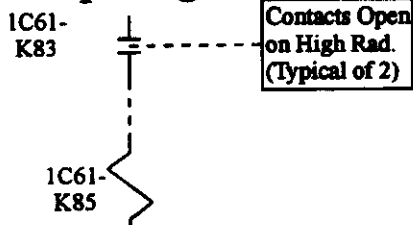
**Southwest
Quadrant**

Trip System "A"

Channel A



Trip Logic

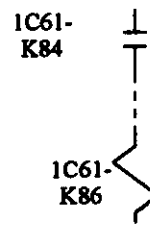


Trip System "B"

Channel B



Trip Logic

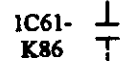


Actuation Logic



Closure of inboard Group 2 PCIS valves
(1T48 Vent and Purge valves only)

Actuation Logic



Closure of outboard Group 2 PCIS valves
(1T48 Vent and Purge valves only)

Minimum Channel Requirements for System Isolation Capability:

In order to maintain Group 2 PCIS isolation capability of the Vent and Purge Valves on drywell high radiation, at least one of the two channels must be either operable or maintained in the tripped condition.

Elem. Ref.
H-17802
H-17803
H-19643

Prepared By: *Stephen A. Reed*

Reviewed By: *Raymond Clark*

LFD-1-PCIS-09

TS 3.3.6.1-1, Item 2.c

Primary Containment

Isolation

Drywell Radiation-High

Rev. 0

1/13/95

SOUTHERN NUCLEAR PLANT E. I. HATCH		DOCUMENT TYPE: ABNORMAL OPERATING PROCEDURE		PAGE 1 OF 12
DOCUMENT TITLE: LOSS OF FUEL POOL COOLING			DOCUMENT NUMBER: 34AB-G41-001-2	VERSION NO: 3.2
EXPIRATION DATE:	APPROVALS: DEPARTMENT MANAGER <u>J. I. Hammonds</u> DATE <u>10/25/01</u>			EFFECTIVE DATE:
NA	NPGM/POAGM/PSAGM <u>N/A</u> DATE <u>N/A</u>			03/21/03

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1.0 CONDITIONS

1.1 ANNUNCIATORS

- 1.1.1 FUEL POOL PUMP DISCH PRESS HIGH, 654-005
- 1.1.2 FUEL POOL PUMP DISCH PRESS LOW, 654-037
- 1.1.3 MULTIPOINT TEMP RCDR 2T41-R620 TEMP HIGH, 654-004

1.2 Increasing Fuel Pool temperature.

2.0 AUTOMATIC ACTIONS

None

3.0 IMMEDIATE OPERATOR ACTIONS

None

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4.0 SUBSEQUENT OPERATOR ACTIONS

NOTE: RPV Cavity and Spent Fuel Boil-off time calculations are provided in Attachments 1, 2 and 3.

- 4.1 IF fuel pool level is decreasing,
enter 34AB-G41-002-2, decreasing Rx Well/Fuel Pool Level, AND
restore fuel pool level to normal level.
- 4.2 IF 2G41-C001, FPC Pump, has tripped,
enter the applicable annunciator response procedure AND
return the pump to service.
- 4.3 IF the FPC pump is running, AND
fuel pool temperature is increasing,
enter 34AB-P42-001-2, Loss of All Reactor Building Closed Cooling Water.

NOTE:

Removal of the Spent Fuel Pool transfer canal gates will require use of the Unit 1 Refueling Floor crane.
Both Refueling Floor cranes are powered from 600V "1D".
IF 600V bus "1D" is lost AND recovered, resetting of the non-essential load lock out is required AND
THEN manually resetting breaker 1T31-E005 (frame 7T) in the 600V "1D" switchgear room in the Control Building.

- 4.4 Ensure Unit One FPC System is in service,
THEN REMOVE the transfer canal gates.
- 4.5 Cross connect to the Unit One FPC System per 34SO-G41-003-2, Fuel Pool Cooling and Cleanup System.
- 4.6 IF the Unit 2 FPC system cannot be restored, AND
Unit 1 FPC cannot be cross connected,
have I&C install 2 calibrated temporary digital temperature monitoring instruments with thermocouples in the fuel pool, approximately 10 feet deep, 1 at each skimmer surge tank, AND log the readings in the operator's log once per hour.
- 4.7 IF available, the Decay Heat Removal System may be placed in service per 34SO-G71-001-0, Decay Heat Removal.
IF the Decay Heat Removal System is installed on Unit 1,
THEN REMOVE the transfer canal gates and place the system in service aligned to the Unit 1 Spent Fuel Pool.

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- 4.8 IF no other means of cooling is available, FEED and BLEED the fuel pool by performing the following,
WHILE maintaining the fuel pool in the normal band.

4.8.1 FEED using one OR more of these methods as required:

- 4.8.1.1 OPEN 2G41-F054, Spent Fuel Pool Make-up from CST.
- 4.8.1.2 Demin water from local hose stations.
- 4.8.1.3 Fire Protection water from local hose stations.
- 4.8.1.4 Plant Service Water by opening the following valves:
 - 2P41-F070A OR 2P41-F070B (Reactor Bldg elv. 130' east wall),
 - 2P41-F073 (Reactor Bldg elv. 185' east side N.W. area 10 feet up, locked valve),
 - 2G41-F040 (Reactor Bldg elv. 203' west wall 10 feet up, locked valve).
- 4.8.1.5 IF Fire Water is the only available source of makeup water to restore Spent Fuel Pool Level, and access to the Refueling Floor is denied (for security, radiation or other personnel safety issues),
THEN establish a flowpath for injection of Fire Water through Plant Service Water piping to the Unit 2 Spent Fuel Pool by performing the actions listed in Attachment 4 (the Shift Supervisor will determine which PSW division will be utilized).

4.8.2 IF FEED to the Unit 2 Spent Fuel Pool cannot be established,
THEN REMOVE the transfer canal gates AND
attempt to FEED the Unit 1 Spent Fuel Pool by using one OR more of these methods:

- 4.8.2.1 OPEN 1G41-F041, Spent Fuel Pool Make-up from CST.
- 4.8.2.2 Demin water from local hose stations.
- 4.8.2.3 Fire Protection water from local hose station.
- 4.8.2.4 Plant Service Water by OPENING the following valves:
 - 1P41-F070A OR 1P41-F070B
(Reactor Bldg elv. 130' S.E. D/W wall right of CRD Hatch, locked valves),
 - 1P41-F103 (Reactor Bldg elv. 203' S.W. Corner 5 feet from floor),
 - 1G41-F217 (Reactor Bldg elv. 203' east on the S.W. Wall, locked valve).

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4.8.2.5 IF Fire Water is the only available source of makeup water to restore Spent Fuel Pool Level, and access to the Refueling Floor is denied (for security, radiation or other personnel safety issues),
THEN establish a flowpath for injection of Fire Water through Plant Service Water piping to the Unit 1 Spent Fuel Pool by performing the actions listed in Attachment 5 (the Shift Supervisor will determine which PSW division will be utilized).

4.8.3 BLEED the Spent Fuel Pool per section 7.3.2 of 34SO-G41-003-2, Fuel Pool Cooling and Cleanup System.

4.9 IF desired, confirm the reactor is in Condition 5 and the reactor cavity is flooded AND the Fuel Pool gates are removed,
THEN place RHR system in the fuel pool assist mode per 34SO-E11-010-2, Residual Heat Removal System.

4.10 WHEN desired, return affected systems/components to service per the applicable System Operating Procedures at the direction of the Shift Supervisor.

5.0 REFERENCES

H-26039, Fuel Pool Cooling System P&ID.

H-26050 & H-26051, Reactor Building Plant Service Water System

H-16011, Reactor Building Service Water System

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ATTACHMENT 1

ATTACHMENT PAGE:
1 OF 2

TITLE: BOIL-OFF TIME FOR RPV CAVITY AND SPENT FUEL

CORE and POOL FUEL in FLOODED RPV and POOL
(Cavity flooded and gates removed)

Days After Shutdown	Heat Load (MBTU/hr)	Saturation Time	Evaporation Time	Boil-Off Time
1.0	60.651	4 hr 58 min	29 hr 17 min	34 hr 16 min
3.0	44.016	6 hr 52 min	40 hr 21 min	47 hr 13 min
5.0	36.191	8 hr 21 min	49 hr 4 min	57 hr 26 min
7.0	31.860	9 hr 29 min	55 hr 45 min	65 hr 15 min
9.0	29.169	10 hr 22 min	60 hr 53 min	71 hr 16 min
11.0	27.294	11 hr 5 min	65 hr 4 min	76 hr 9 min
13.0	25.857	11 hr 42 min	68 hr 41 min	80 hr 23 min
15.0	24.676	12 hr 15 min	71 hr 58 min	84 hr 14 min
17.0	23.661	12 hr 47 min	75 hr 4 min	87 hr 51 min
19.0	22.762	13 hr 17 min	78 hr 2 min	91 hr 19 min
21.0	21.954	13 hr 47 min	80 hr 54 min	94 hr 41 min
23.0	21.219	14 hr 15 min	83 hr 42 min	97 hr 58 min
25.0	20.546	14 hr 43 min	86 hr 26 min	101 hr 10 min

NOTE : Saturation Time is the time differential between the time of complete loss of cooling (Shutdown & Fuel Pool) and the onset of boiling.

Evaporation Time is the time differential between the Saturation Time and the Boil-off Time.

Boil-off Time is the time differential between the time of complete loss of cooling (Shutdown & Fuel Pool) and the time water level reaches the top of fuel.

DOCUMENT TITLE:
LOSS OF FUEL POOL COOLINGDOCUMENT NUMBER:
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ATTACHMENT 1

ATTACHMENT PAGE:
2 OF 2

TITLE: BOIL-OFF TIME FOR RPV CAVITY AND SPENT FUEL

CORE and POOL FUEL in FLOODED RPV and POOL (cont'd)
(Cavity flooded and gates removed)

Days After Shutdown	Heat Load (MBTU/hr)	Saturation Time	Evaporation Time	Boil-Off Time
27.0	19.927	15 hr 11 min	89 hr 8 min	104 hr 19 min
29.0	19.356	15 hr 38 min	91 hr 55 min	107 hr 24 min
31.0	18.828	16 hr 4 min	94 hr 20 min	110 hr 24 min
33.0	18.339	16 hr 30 min	96 hr 51 min	113 hr 21 min
35.0	17.885	16 hr 55 min	99 hr 18 min	116 hr 14 min
37.0	17.463	17 hr 19 min	101 hr 42 min	119 hr 2 min
39.0	17.070	17 hr 43 min	104 hr 3 min	121 hr 47 min
41.0	16.703	18 hr 7 min	106 hr 20 min	124 hr 27 min
43.0	16.360	18 hr 30 min	108 hr 34 min	127 hr 4 min
45.0	16.039	18 hr 52 min	110 hr 44 min	129 hr 36 min
47.0	15.738	19 hr 13 min	112 hr 51 min	132 hr 5 min
49.0	15.456	19 hr 34 min	114 hr 55 min	134 hr 30 min

NOTE : Saturation Time is the time differential between the time of complete loss of cooling (Shutdown & Fuel Pool) and the onset of boiling.

Evaporation Time is the time differential between the Saturation Time and the Boil-off Time.

Boil-off Time is the time differential between the time of complete loss of cooling (Shutdown & Fuel Pool) and the time water level reaches the top of fuel.

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ATTACHMENT <u>2</u> TITLE: BOIL-OFF TIME FOR SPENT FUEL POOL ONLY WITH ENTIRE CORE UNLOADED			ATT. PAGE: 1 OF 2

POOL FUEL and ENTIRE CORE in POOL
(Cavity gates installed)

Days After Shutdown	Heat Load (MBTU/hr)	Saturation Time	Evaporation Time	Boil-Off Time
1.0	60.651	2 hr 18 min	27 hr 47 min	30 hr 6 min
3.0	44.016	3 hr 10 min	38 hr 18 min	41 hr 28 min
5.0	36.191	3 hr 51 min	46 hr 34 min	50 hr 26 min
7.0	31.860	4 hr 23 min	52 hr 54 min	57 hr 18 min
9.0	29.169	4 hr 47 min	57 hr 47 min	62 hr 35 min
11.0	27.294	5 hr 7 min	61 hr 45 min	66 hr 53 min
13.0	25.857	5 hr 24 min	65 hr 11 min	70 hr 36 min
15.0	24.676	5 hr 40 min	68 hr 19 min	73 hr 58 min
17.0	23.661	5 hr 54 min	71 hr 15 min	77 hr 9 min
19.0	22.762	6 hr 8 min	74 hr 3 min	80 hr 12 min
21.0	21.954	6 hr 22 min	76 hr 47 min	83 hr 9 min
23.0	21.219	6 hr 35 min	79 hr 27 min	86 hr 2 min
25.0	20.546	6 hr 48 min	82 hr 3 min	88 hr 51 min

NOTE : Saturation Time is the time differential between the time of complete loss of Fuel Pool cooling and the onset of boiling.
Evaporation Time is the time differential between the Saturation Time and the Boil-off Time.
Boil-off Time is the time differential between the time of complete loss of Fuel Pool cooling and the time water level reaches the top of fuel.

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ATTACHMENT 2

ATT. PAGE:

TITLE: BOIL-OFF TIME FOR SPENT FUEL POOL ONLY WITH ENTIRE CORE
UNLOADED

2 OF 2

POOL FUEL and ENTIRE CORE in POOL (cont'd)
(Cavity gates installed)

Days After Shutdown	Heat Load (MBTU/hr)	Saturation Time	Evaporation Time	Boil-Off Time
27.0	19.927	7 hr 1 min	84 hr 36 min	91 hr 37 min
29.0	19.356	7 hr 13 min	87 hr 5 min	94 hr 19 min
31.0	18.828	7 hr 25 min	89 hr 32 min	96 hr 58 min
33.0	18.339	7 hr 37 min	91 hr 55 min	99 hr 33 min
35.0	17.885	7 hr 49 min	94 hr 15 min	102 hr 4 min
37.0	17.463	8 hr 0 min	96 hr 32 min	104 hr 32 min
39.0	17.070	8 hr 11 min	98 hr 45 min	106 hr 57 min
41.0	16.703	8 hr 22 min	100 hr 55 min	109 hr 18 min
43.0	16.360	8 hr 32 min	103 hr 2 min	111 hr 35 min
45.0	16.039	8 hr 43 min	105 hr 6 min	113 hr 49 min
47.0	15.738	8 hr 53 min	107 hr 7 min	116 hr 0 min
49.0	15.456	9 hr 2 min	109 hr 4 min	118 hr 7 min

NOTE : Saturation Time is the time differential between the time of complete loss of Fuel Pool cooling and the onset of boiling.

Evaporation Time is the time differential between the Saturation Time and the Boil-off Time.

Boil-off Time is the time differential between the time of complete loss of Fuel Pool cooling and the time water level reaches the top of fuel.

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ATTACHMENT 3

ATT. PAGE:

TITLE: BOIL-OFF TIME FOR SPENT FUEL POOL ONLY WITH PARTIAL CORE
UNLOADED

1 OF 2

POOL FUEL and PARTIAL CORE of 188 BUNDLES in POOL
(Cavity gates installed)

Days After Shutdown	Heat Load (MBTU/hr)	Saturation Time	Evaporation Time	Boil-Off Time
1.0	23.106	6 hr 3 min	72 hr 58 min	79 hr 1 min
3.0	17.519	7 hr 59 min	96 hr 14 min	104 hr 13 min
5.0	14.890	9 hr 23 min	113 hr 13 min	122 hr 36 min
7.0	13.433	10 hr 24 min	125 hr 30 min	135 hr 54 min
9.0	12.527	11 hr 9 min	134 hr 35 min	145 hr 44 min
11.0	11.895	11 hr 45 min	141 hr 44 min	153 hr 29 min
13.0	11.411	12 hr 15 min	147 hr 44 min	159 hr 59 min
15.0	11.012	12 hr 42 min	153 hr 6 min	165 hr 48 min
17.0	10.868	13 hr 6 min	158 hr 2 min	171 hr 8 min
19.0	10.364	13 hr 29 min	162 hr 40 min	176 hr 9 min
21.0	10.090	13 hr 51 min	167 hr 5 min	180 hr 56 min
23.0	9.843	14 hr 12 min	171 hr 19 min	185 hr 31 min
25.0	9.613	14 hr 33 min	175 hr 23 min	189 hr 56 min

NOTE : Saturation Time is the time differential between the time of complete loss of Fuel Pool cooling and the onset of boiling.

Evaporation Time is the time differential between the Saturation Time and the Boil-off Time.

Boil-off Time is the time differential between the time of complete loss of Fuel Pool cooling and the time water level reaches the top of fuel.

DOCUMENT TITLE:
LOSS OF FUEL POOL COOLINGDOCUMENT NUMBER:
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3.2ATTACHMENT 3

ATT. PAGE:

TITLE: BOIL-OFF TIME FOR SPENT FUEL POOL ONLY WITH PARTIAL CORE
UNLOADED

2 OF 2

POOL FUEL and PARTIAL CORE of 188 BUNDLES in POOL (cont'd)
(Cavity gates installed)

Days After Shutdown	Heat Load (MBTU/hr)	Saturation Time	Evaporation Time	Boil-Off Time
25.0	9.505	14 hr 12 min	177 hr 22 min	192 hr 4 min
27.0	9.402	14 hr 52 min	179 hr 18 min	194 hr 10 min
28.0	9.373	15 hr 2 min	181 hr 12 min	196 hr 14 min
29.0	9.208	15 hr 11 min	183 hr 5 min	198 hr 16 min
30.0	9.135	15 hr 18 min	185 hr 10 min	200 hr 18 min
31.0	9.029	15 hr 29 min	186 hr 43 min	202 hr 12 min
32.0	8.952	15 hr 35 min	188 hr 10 min	204 hr 14 min
33.0	8.862	15 hr 46 min	190 hr 14 min	206 hr 0 min
34.0	8.795	15 hr 52 min	192 hr 10 min	207 hr 38 min
35.0	8.707	16 hr 3 min	193 hr 37 min	209 hr 40 min
36.0	8.643	16 hr 12 min	195 hr 15 min	211 hr 37 min
37.0	8.563	16 hr 20 min	196 hr 52 min	213 hr 12 min
38.0	8.495	16 hr 27 min	198 hr 27 min	214 hr 54 min
39.0	8.429	16 hr 35 min	200 hr 0 min	216 hr 35 min
40.0	8.365	16 hr 43 min	201 hr 32 min	218 hr 15 min
41.0	8.304	16 hr 50 min	203 hr 2 min	219 hr 52 min
42.0	8.244	17 hr 5 min	204 hr 30 min	221 hr 28 min
43.0	8.186	17 hr 5 min	205 hr 56 min	223 hr 1 min
44.0	8.130	17 hr 12 min	207 hr 21 min	224 hr 53 min
45.0	8.076	17 hr 19 min	208 hr 45 min	226 hr 4 min
46.0	8.024	17 hr 25 min	210 hr 9 min	227 hr 31 min
47.0	7.973	17 hr 32 min	211 hr 27 min	228 hr 59 min
48.0	7.923	17 hr 38 min	213 hr 30 min	230 hr 28 min
49.0	7.876	17 hr 45 min	214 hr 3 min	231 hr 48 min
50.0	7.830	17 hr 52 min	215 hr 18 min	233 hr 10 min

NOTE : Saturation Time is the time differential between the time of complete loss of Fuel Pool cooling and the onset of boiling.

Evaporation Time is the time differential between the Saturation Time and the Boil-off Time.

Boil-off Time is the time differential between the time of complete loss of Fuel Pool cooling and the time water level reaches the top of fuel.

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ATTACHMENT <u>4</u> TITLE: INJECTION OF FIRE WATER THROUGH PSW PIPING TO UNIT 2 FUEL POOL			ATT PAGE: 1 OF 1

Division 1

- 1.0 To inject Fire Water through the Unit 2 Division 1 PSW piping, align the following valves:
 - 1.1 CLOSE 2P41-F066 (control switch on 2H11-P657)
 - 1.2 CLOSE 2P41-F049 (DW Chiller room)
 - 1.3 CLOSE 2P41-F050 (DW Chiller room)
 - 1.4 CLOSE 2P41-F1181 (Bay 1 inner CW)
 - 1.5 CLOSE 2P41-F052A (130' Rx Bldg east wall)
 - 1.6 OPEN 2P41-F109 (Bay 1 outer CW)
 - 1.7 OPEN 2T43-F156 (Bay 1, 114' elev.)
 - 1.8 OPEN 2P41-F070A (RB 130' east wall)
 - 1.9 OPEN 2P41-F073 (RB 185' E side NW area next to cooler)
 - 1.10 CLOSE 2P41-F111 (130' RB E. wall at PSW lines near Decon)
 - 1.11 Unlock and OPEN 2G41-F040 (203' RB west wall)

Division 2

- 2.0 To inject Fire Water through the Unit 2 Division 2 PSW piping, align the following valves:
 - 2.1 CLOSE 2P41-F067 (control switch on 2H11-P654)
 - 2.2 CLOSE 2P41-F1176 (Bay 4 & 5 by inner CW)
 - 2.3 CLOSE 2P41-F052B (130' Rx Bldg east wall)
 - 2.4 OPEN 2P41-F108 (Bay 1, 125' elev.)
 - 2.5 OPEN 2T43-F157 (Bay 1, 114' elev.)
 - 2.6 OPEN 2P41-F070B (RB 130' east wall)
 - 2.7 OPEN 2P41-F073 (RB 185' E side NW area next to cooler)
 - 2.8 Unlock and OPEN 2G41-F040 (203' RB west wall)
- 3.0 After aligning one (or more) PSW flowpaths, START one or more Fire Pumps and inject Fire Water into the Unit 2 Spent Fuel Pool as necessary to maintain SFP levels as directed by the Shift Supervisor.

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ATTACHMENT 5			ATT PAGE: 1 OF 1
TITLE: INJECTION OF FIRE WATER THROUGH PSW PIPING TO UNIT 1 FUEL POOL			

Division 1

1.0 To inject Fire Water through the Unit 1 Division 1 PSW piping, align the following valves:

- 1.1 CLOSE 1P41-F067 (control switch on 1H11-P657)
- 1.2 CLOSE 1P41-F1383 (Torus 119' el. Bay 10)
- 1.3 CLOSE 1P41-F052B (130' Rx Bldg east wall)
- 1.4 OPEN 1P41-F120 (Torus east over outer CW bay 9)
- 1.5 OPEN 1P41-F122 (Torus Bay 8 outer CW at wall)
- 1.6 Unlock and OPEN 1P41-F070A (RB 130' SE DW wall)
- 1.7 OPEN 1P41-F103 (RB 203' SW corner)
- 1.8 Unlock and OPEN 1G41-F217 (203' RX Bldg east on SW wall)

Division 2

2.0 To inject Fire Water through the Unit 1 Division 2 PSW piping, align the following valves:

- 2.1 CLOSE 1P41-F066 (control switch on 1H11-P654)
- 2.2 CLOSE 1P41-F1386 (Torus Room 123' elevation (moving west from ladder; bay 7)
- 2.3 CLOSE 1P41-F052A (130 Rx Bldg East wall next to DW wall)
- 2.4 OPEN 1P41-F121 (Torus bay 8 outer CW at wall)
- 2.5 OPEN 1P41-F119 (Torus east over outer CW bay 8)
- 2.6 Unlock and OPEN 1P41-F070B (RB 130' SE DW wall)
- 2.7 OPEN 1P41-F103 (RB 203' SW corner)
- 2.8 Unlock and OPEN 1G41-F217 (203' RX Bldg East on SW wall)
- 2.9 Confirm OPEN/OPEN 1P41-F1702 (Torus Bay 9 outer catwalk)

3.0 After aligning one (or more) PSW flowpaths, START one or more Fire Pumps and inject Fire Water into the Spent Fuel Pool as necessary to maintain SFP levels as directed by the Shift Supervisor.

3.6 CONTAINMENT SYSTEMS

3.6.2.1 Suppression Pool Average Temperature

LCO 3.6.2.1 Suppression pool average temperature shall be:

- a. $\leq 100^{\circ}\text{F}$ when any OPERABLE intermediate range monitor (IRM) channel is $> 25/40$ divisions of full scale on Range 7 and no testing that adds heat to the suppression pool is being performed;
- b. $\leq 105^{\circ}\text{F}$ when any OPERABLE IRM channel is $> 25/40$ divisions of full scale on Range 7 and testing that adds heat to the suppression pool is being performed; and
- c. $\leq 110^{\circ}\text{F}$ when all OPERABLE IRM channels are $\leq 25/40$ divisions of full scale on Range 7.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. Suppression pool average temperature $> 100^{\circ}\text{F}$ but $\leq 110^{\circ}\text{F}$.</p> <p><u>AND</u></p> <p>Any OPERABLE IRM channel $> 25/40$ divisions of full scale on Range 7.</p> <p><u>AND</u></p> <p>Not performing testing that adds heat to the suppression pool.</p>	A.1 Verify suppression pool average temperature $\leq 110^{\circ}\text{F}$.	Once per hour
	<u>AND</u>	
	A.2 Restore suppression pool average temperature to $\leq 100^{\circ}\text{F}$.	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met.	B.1 Reduce THERMAL POWER until all OPERABLE IRM channels $\leq 25/40$ divisions of full scale on Range 7.	12 hours
C. Suppression pool average temperature $> 105^{\circ}\text{F}$. <u>AND</u> Any OPERABLE IRM channel $> 25/40$ divisions of full scale on Range 7. <u>AND</u> Performing testing that adds heat to the suppression pool.	C.1 Suspend all testing that adds heat to the suppression pool.	Immediately
D. Suppression pool average temperature $> 110^{\circ}\text{F}$ but $\leq 120^{\circ}\text{F}$.	D.1 Place the reactor mode switch in the shutdown position. <u>AND</u> D.2 Verify suppression pool average temperature $\leq 120^{\circ}\text{F}$. <u>AND</u> D.3 Be in MODE 4.	Immediately Once per 30 minutes 36 hours

(continued)

Suppression Pool Average Temperature
3.6.2.1

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Suppression pool average temperature > 120°F.	E.1 Depressurize the reactor vessel to < 200 psig.	12 hours
	<u>AND</u>	
	E.2 Be in MODE 4.	36 hours

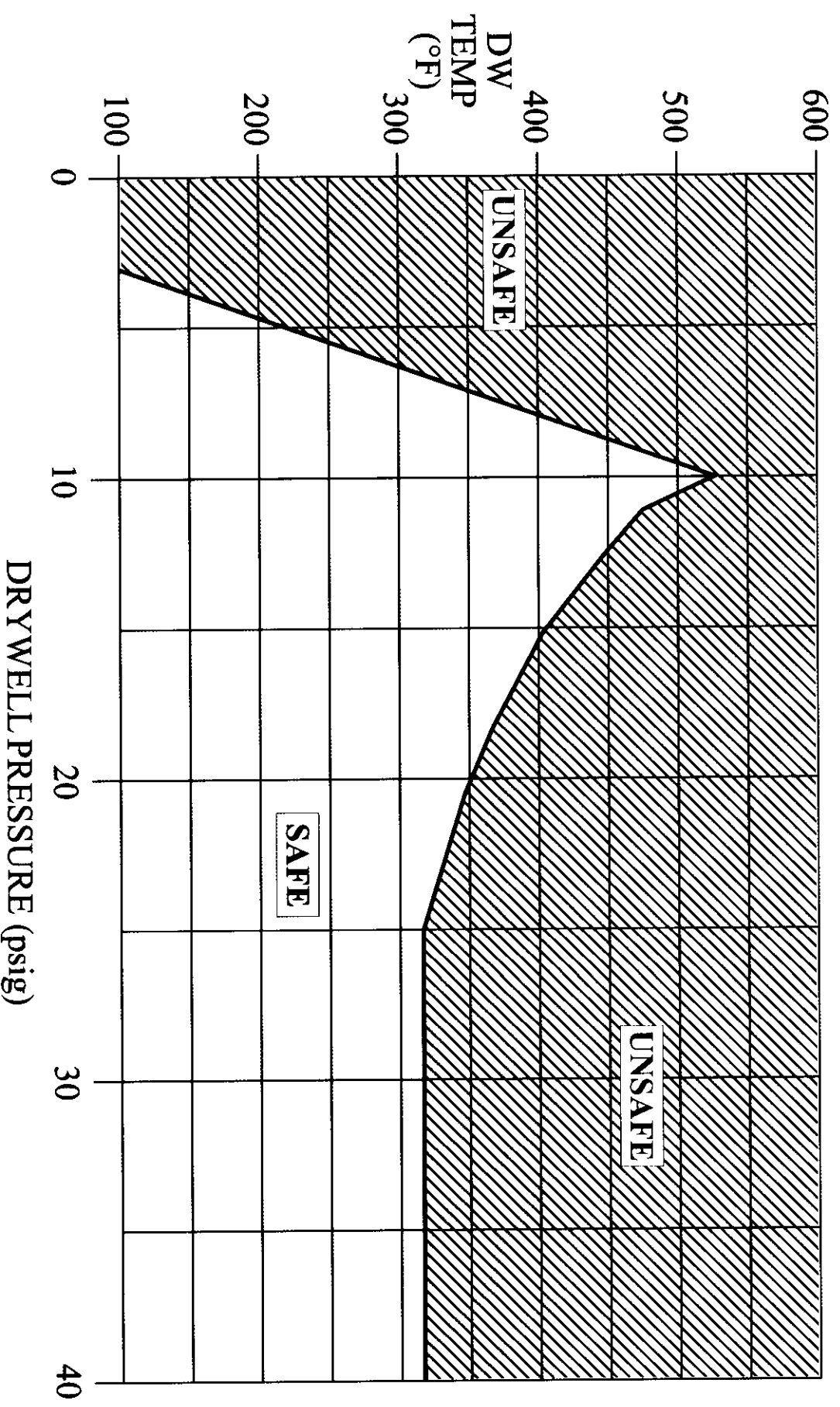
SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.2.1.1	Verify suppression pool average temperature is within the applicable limits.	24 hours
		<u>AND</u> 5 minutes when performing testing that adds heat to the suppression pool

GRAPH 8

UNIT 2

DRYWELL SPRAY INITIATION LIMIT

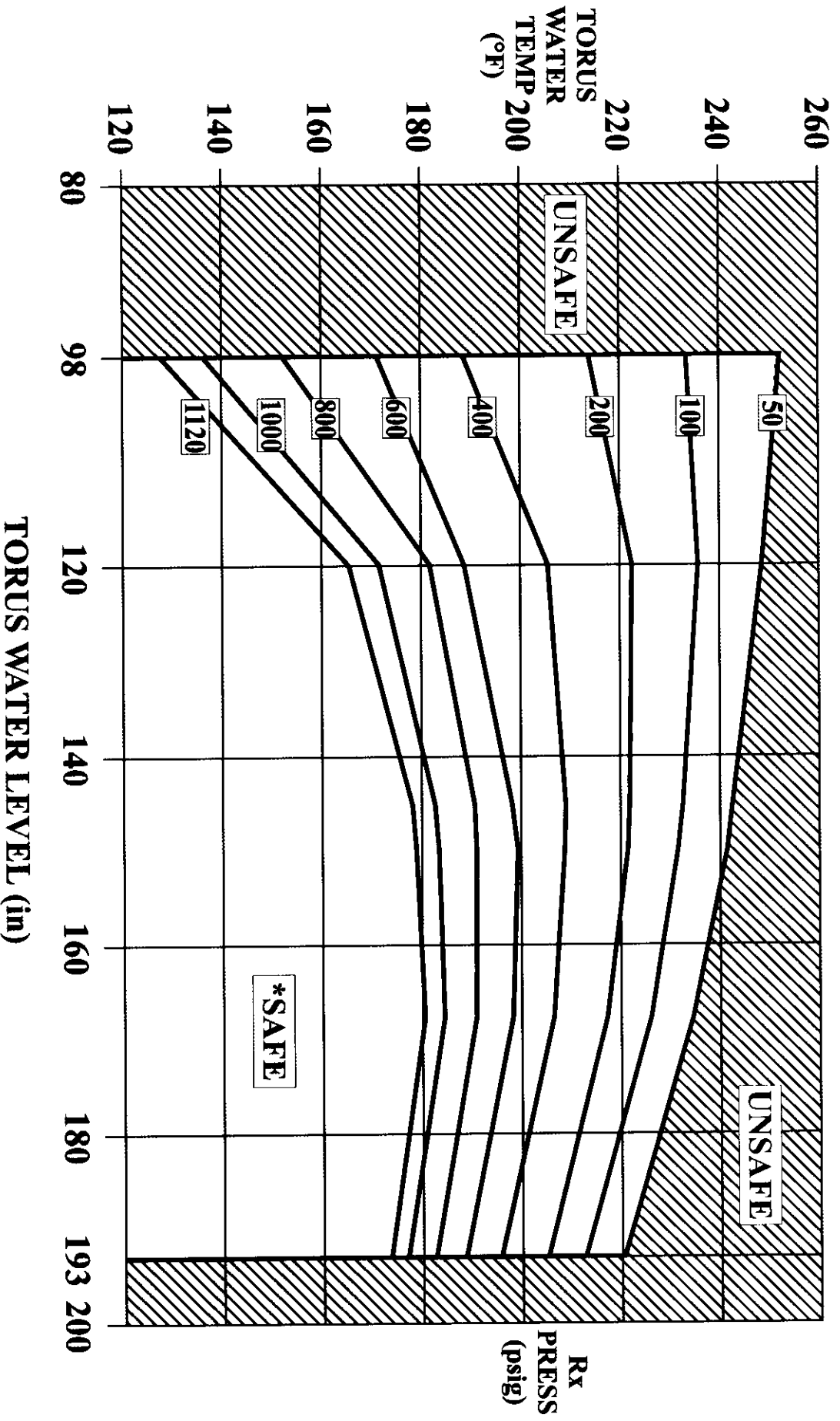


NOTE: May use SPDS Emergency Displays in place of this Graph.

GRAPH 2

UNIT 2

HEAT CAPACITY TEMPERATURE LIMIT



NOTE: May use SPDS Emergency Displays in place of this Graph.

* Safe operating is below the applicable pressure line.