



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30323

Report No.: 50-400/86-59

Licensee: Carolina Power and Light Company
 P. O. Box 1551
 Raleigh, NC 27602

Docket No.: 50-400

License No.: CPPR-158

Facility Name: Harris Unit 1

Inspection Conducted: July 21-25, 1986

Inspector:

P. M. Madden
 P. M. Madden

8/18/86

Date Signed

Approved by:

T. E. Conlon
 T. E. Conlon, Section Chief
 Plant Systems Section
 Division of Reactor Safety

8/21/86

Date Signed

SUMMARY

Scope: This announced inspection was conducted in the areas of fire protection and the licensee's actions regarding implementation of the guidance provided in NUREG 0800, Standard Review Plan, Section 9.5.1, Fire Protection Program, Position C.5.b.

Results: No violations or deviations were identified.

8609030171 860825
 PDR ADOCK 05000400
 Q PDR

1948

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation and the second section deals with the progress of the work.

2. The second part of the report deals with the results of the work during the year. It is divided into two main sections: the first section deals with the results of the work in the field of research and the second section deals with the results of the work in the field of education.

3. The third part of the report deals with the financial situation of the institution during the year. It is divided into two main sections: the first section deals with the income and the second section deals with the expenditure.

4. The fourth part of the report deals with the personnel situation of the institution during the year. It is divided into two main sections: the first section deals with the staff and the second section deals with the students.

5. The fifth part of the report deals with the general conclusions and recommendations of the report. It is divided into two main sections: the first section deals with the general conclusions and the second section deals with the recommendations.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *J. Collins, Manager Operations
- *S. Hardy, Harris Plant Engineering Support
- *J. Harness, Assistant Plant Manager
- *A. Howe, Specialist, Regulatory Compliance
 - J. Lawrence, HPES, Technical Assistant
 - D. Markle, Fire Protection, Harris Project Operations Support
- *C. McKenzie, Acting Director, QA/QC Operations
- *M. Oats, Principal Engineer, Nuclear Licensing
- *J. Pinto, HPES-Fire Protection
- *J. Smith, Operations
- *R. Stewart, HPES-Mechanical
 - M. Stokes, Fire Protection, Harris Project Operations Support
 - D. Tibbitts, Acting Director, Regulatory Compliance
- *M. Wallace, Specialist Regulatory Compliance
- *J. Willis, Plant General Manager

Other licensee employees contacted included construction craftsmen, engineers, technicians, operators, mechanics, security force members and office personnel.

NRC Resident Inspector

- *G. Humphrey

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 25, 1986, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters

- a. (Closed) URI (400/86-27-01), Possible Deviation from A Commitment on Fire Barrier Separation of Fuel Handling Building for Receipt of New Fuel. NRC fire protection guidelines of Section C.1.e(1) of Branch Technical Position (BTP) CMEB 9.5-1 state that the fire protection program for buildings storing new reactor fuel and for adjacent areas that could affect the fuel storage area should be fully operational before fuel is received at the site. By letter, dated October 14,



187



1983, the licensee committed to meet the guidelines of Section C.1.e(1) of BTP CMEB 9.5-1. By letter, dated April 16, 1986, the licensee informed the NRC that it could not meet this commitment because electrical penetrations in a new fuel storage area fire barrier will not be sealed before fuel is received at the site.

On that basis, the licensee established a continuous fire watch on fuel handling building elevation 286' - 0" as a compensatory measure and committed to seal the penetrations by July 1, 1986. On May 12, 1986, the NRC issued a safety evaluation report which approved the compensatory fire protection measures associated with the fuel handling building. In addition, the inspector verified that the licensee completed the penetration seal installations as scheduled. Therefore, this item is closed.

- b. (Closed) URI (400/86-27-03), Implementation of the Operations Phase Fire Protection Program Within 90 Days Prior to Fuel Load. The licensee's fire protection quality assurance (QA) program for the operational phase is controlled by the policies and requirements of the corporate QA program. FSAR Section 17.2.2.1 requires the corporate QA program to be implemented at least 90 days prior to fuel load. The licensee's fuel load date of July 25, 1986, has been rescheduled to October 1, 1986. The licensee's operational phase fire protection program was fully implemented on April 30, 1986. Therefore, based on the current fuel load schedule, it appears that the licensee's fire protection program has been implemented on a schedule which is consistent with the commitments made in FSAR Section 17.2.2.1. This item is closed.

4. Unresolved Items

Unresolved items were not identified during the inspection.

5. Permanent Plant Fire Protection Features (Module 64704)

During the week of May 5, 1986, the NRC conducted a pre-licensee inspection of the licensee's methodology associated with their safe shutdown analysis due to fire, alternative shutdown capabilities and the proposed plant fire protection features to protect safe plant shutdown capabilities.

In addition, during this inspection the NRC evaluated the readiness of the plant fire brigade with respect to their capabilities to adequately control and suppress fires in plant areas important to nuclear safety.

As a result of this inspection, the NRC expressed concerns with respect to the overall manual firefighting capabilities of the brigade and the incomplete construction/installation status of the permanent plant fire protection features required to protect the safe shutdown capabilities of the plant.

Based on the May 5-9, 1986 inspection results, a subsequent inspection was conducted during the week of June 3, 1986, to evaluate associated circuits and assess the licensee's fire brigade re-training program.

As a result of this inspection, the NRC expressed some additional fire brigade concerns with respect to brigade fire response time and radio communications. In addition, this inspection identified associated circuit concerns dealing with periodic testing of circuit breaker covered by the licensee's coordination study and the status of the installation of redundant fusing of transfer switches.

Therefore, as a result of the inspection items identified from the May 5-9, 1986 and the June 3-6, 1986 inspections, this inspection was conducted to assess the licensee's status with respect to completing the permanent plant fire protection feature installations (i.e., fire doors, penetration seals, fire detection systems, sprinkler systems, raceway fire barriers, etc.) prior to fuel load and the adequacy of the plant fire brigade's manual firefighting capabilities.

The licensee has tentatively rescheduled their fuel load date from July 25, 1986, to October 1, 1986. Subsequently, they have rescheduled the completion of the following permanent plant fire protection features:

- Emergency Lighting - August 20, 1986
 - Fire Area Fire Barriers and Penetration Seals - August 30, 1986
 - Raceway Fire Barriers One and Three Hour Types - September 10, 1986 and August 27, 1986, respectively
 - Sprinkler Pipe and Hangers - July 25, 1986
- a. Status of Completion and Walkdown of Raceway Fire Barriers

In order to assess the current completion status of the raceway fire barriers prior to fuel load, the following sample of electrical pull boxes, conduits, and cable trays which are required to be protected by either a one-hour or three-hour fire barrier enclosure were field inspected by the inspector:

(1) Pull Box Fire Barrier Inspection

<u>Box No.</u>	<u>Fire Rating</u>	<u>Location</u>	<u>Status</u>
B1387	1 hour (HR)	Reactor auxiliary building (RAB) elevation (e1) 236' - 0"	Complete
B1555	1 HR	RAB e1 261' - 0"	Complete

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

REPORT OF THE
COMMISSION ON THE ORGANIZATION
OF THE DEPARTMENT OF CHEMISTRY

FOR THE YEAR 1964-1965
BY
THE COMMISSION ON THE ORGANIZATION
OF THE DEPARTMENT OF CHEMISTRY

CHICAGO, ILLINOIS
1965

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

REPORT OF THE
COMMISSION ON THE ORGANIZATION
OF THE DEPARTMENT OF CHEMISTRY

FOR THE YEAR 1964-1965
BY
THE COMMISSION ON THE ORGANIZATION
OF THE DEPARTMENT OF CHEMISTRY

CHICAGO, ILLINOIS
1965

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

(cont'd) <u>Box No.</u>	<u>Fire Rating</u>	<u>Location</u>	<u>Status</u>
B1617	1 HR	Control Building (CB) e1 286' - 0"	Complete
B1644	3 HR	RAB e1 286' - 0"	Complete
B1658	3 HR	RAB e1 286' - 0"	Complete
B1671	1 HR	RAB e1 261' - 0"	Not Complete
B1717	3 HR	CB e1 286' - 0"	Complete
B1746	3 HR	RAB e1 261' - 0"	Complete
B1868	3 HR	Fuel handling building (FHB) outside wall	Complete
B1870	3 HR	FHB outside wall	Complete
B5032	1 HR	RAB e1 261' - 0"	Complete
B5036	1 HR	RAB e1 261' - 0"	Complete
B5072	3 HR	RAB e1 286' - 0"	Complete
B5268	1 HR	RAB e1 261' - 0"	Not Complete
B6064	3 HR	RAB e1 286' - 0"	Complete

(2) Cable tray fire barrier inspection

<u>Cable Tray No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
C1300	1 HR	310	RAB e1 261' - 0"	43%
C1812	1 HR	106	RAB e1 261' - 0"	64%

1942

1. 1942

2. 1942

3. 1942

4. 1942

5. 1942

6. 1942

7. 1942

8. 1942

9. 1942

10. 1942

11. 1942

12. 1942

13. 1942

14. 1942

15. 1942

16. 1942

17. 1942

18. 1942

19. 1942

20. 1942

21. 1942

22. 1942

23. 1942

24. 1942

25. 1942

26. 1942

27. 1942

28. 1942

29. 1942

30. 1942

31. 1942

32. 1942

33. 1942

34. 1942

35. 1942

36. 1942

37. 1942

38. 1942

39. 1942

40. 1942

41. 1942

42. 1942

43. 1942

44. 1942

45. 1942

46. 1942

47. 1942

48. 1942

49. 1942

50. 1942

51. 1942

52. 1942

53. 1942

54. 1942

55. 1942

56. 1942

57. 1942

58. 1942

59. 1942

60. 1942

61. 1942

62. 1942

63. 1942

64. 1942

65. 1942

66. 1942

67. 1942

68. 1942

69. 1942

70. 1942

71. 1942

72. 1942

73. 1942

74. 1942

75. 1942

76. 1942

77. 1942

78. 1942

79. 1942

80. 1942

81. 1942

82. 1942

83. 1942

84. 1942

85. 1942

86. 1942

87. 1942

88. 1942

89. 1942

90. 1942

91. 1942

92. 1942

93. 1942

94. 1942

95. 1942

96. 1942

97. 1942

98. 1942

99. 1942

100. 1942

(cont'd)

<u>Cable Tray No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
P1305	1 HR	188	RAB e1 261' - 0"	57%
P1816	1 HR	106	RAB e1 261' - 0"	66%
X1303	1 HR	144	RAB e1 261' - 0"	19%
X1803	1 HR	23	RAB e1 261' - 0"	100%
X1806	1 HR	128	RAB e1 261' - 0"	54%

(3) Conduit Fire Barrier Inspection

<u>Conduit No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
10071Q	3 HR	60	RAB e1 286' - 0"	100%
10149J	1 HR	36	CB e1 286' - 0"	100%
10310A	1 HR	45	CB e1 286' - 0"	64%
10333A	1 HR	269	RAB e1 236' - 0"	54%
10333A	3 HR	28	RAB e1, 236' - 0"	0%
11950G	1 HR	36	RAB e1 261' - 0"	100%
12211A	3 HR	59	Tank Building No. 1 e1 236' - 0"	100%

Item No.	Description	Quantity	Unit Price	Total Price
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020

(cont'd)

<u>Conduit No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
12761A	1 HR	116	RAB e1 236' - 0"	93%
12761E	1 HR	155	RAB e1 236' - 0"	93%
12762A	1 HR	274	RAB e1 236' - 0"	28%
12774A	1 HR	75	RAB e1 236' - 0"	90%
15000V	1 HR	34	RAB e1 261' - 0"	100%
15002B	1 HR	4	RAB e1 236' - 0"	75%
15002G	1 HR	3	RAB e1 261' - 0"	100%
15002H	1 HR	3	RAB e1 261' - 0"	100%
15405S	1 HR	9	RAB e1 261' - 0"	33%
15418S	1 HR	11	RAB e1 261' - 0"	45%
15422L	1 HR	3	RAB e1 261' - 0"	100%
15429G	3 HR	2	CB e1 286' - 0"	100%
15429H	3 HR	1	CB e1 286' - 0"	100%
15430Q	1 HR	20	RAB e1 261' - 0"	100%
15434P	3 HR	4	RAB e1 236' - 0"	100%

Code	Category	Item	Quantity	Unit	Price	Total
001
002
003
004
005
006
007
008
009
010
011
012
013
014
015
016
017
018
019
020

(cont'd)

<u>Conduit No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
15437U	1 HR	54	RAB e1 261' - 0"	100%
15438V	3 HR	4	RAB e1 236' - 0"	100%
15449L	1 HR	9	RAB e1 261' - 0"	100%
15449U	1 HR	2	RAB e1 261' - 0"	100%
15449V	1 HR	2	RAB e1 261' - 0"	100%
15465R	3 HR	14	RAB e1 286' - 0"	100%
15465R	1 HR	21	RAB e1 261' - 0"	100%
15465S	3 HR	15	RAB e1 286' - 0"	100%
15465S	1 HR	42	RAB e1 261' - 0"	100%
15485N	1 HR	151	RAB e1 236' - 0"	82%
16001E	3 HR	60	Tank Building No.1 e1 236' - 0"	99%
16030R	1 HR	11	RAB e1 261' - 0"	100%
16030S	1 HR	11	RAB e1 261' - 0"	100%
16030T	1 HR	11	RAB e1 261' - 0"	100%

Year	Month	Day	Time	Location	Remarks
1950	Jan	1	10:00	...	...
1950	Jan	2	10:00	...	...
1950	Jan	3	10:00	...	...
1950	Jan	4	10:00	...	...
1950	Jan	5	10:00	...	...
1950	Jan	6	10:00	...	...
1950	Jan	7	10:00	...	...
1950	Jan	8	10:00	...	...
1950	Jan	9	10:00	...	...
1950	Jan	10	10:00	...	...
1950	Jan	11	10:00	...	...
1950	Jan	12	10:00	...	...
1950	Jan	13	10:00	...	...
1950	Jan	14	10:00	...	...
1950	Jan	15	10:00	...	...
1950	Jan	16	10:00	...	...
1950	Jan	17	10:00	...	...
1950	Jan	18	10:00	...	...
1950	Jan	19	10:00	...	...
1950	Jan	20	10:00	...	...
1950	Jan	21	10:00	...	...
1950	Jan	22	10:00	...	...
1950	Jan	23	10:00	...	...
1950	Jan	24	10:00	...	...
1950	Jan	25	10:00	...	...
1950	Jan	26	10:00	...	...
1950	Jan	27	10:00	...	...
1950	Jan	28	10:00	...	...
1950	Jan	29	10:00	...	...
1950	Jan	30	10:00	...	...
1950	Jan	31	10:00	...	...

(cont'd)

<u>Conduit No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
16034U	1 HR	2	RAB e1 261' - 0"	100%
16034R	1 HR	22	RAB e1 261' - 0"	100%
16034Q	1 HR	24	RAB e1 261' - 0"	100%
16034V	1 HR	2	RAB e1 261' - 0"	100%
16034Y	1 HR	2	RAB e1 261' - 0"	100%
16034Z	1 HR	22	RAB e1 261' - 0"	100%
16040R	1 HR	21	RAB e1 261' - 0"	100%
16078E	1 HR	24	RAB e1 261' - 0"	100%
16078F	1 HR	24	RAB e1 261' - 0"	100%
16106E	1 HR	33	CB e1 286' - 0"	90%
16178T	1 HR	101	RAB e1 261' - 0"	93%
1642B	1 HR	71	CB e1 286' - 0"	95%
16247A	1 HR	216	CB e1 286' - 0"	63%
16247B	1 HR	138	RAB e1 261' - 0"	75%

1944

DATE	DESCRIPTION	AMOUNT	BALANCE
1/1	Balance		100.00
1/5
1/10
1/15
1/20
1/25
1/30
2/5
2/10
2/15
2/20
2/25
2/28
3/5
3/10
3/15
3/20
3/25
3/30
4/5
4/10
4/15
4/20
4/25
4/30
5/5
5/10
5/15
5/20
5/25
5/30
6/5
6/10
6/15
6/20
6/25
6/30
7/5
7/10
7/15
7/20
7/25
7/30
8/5
8/10
8/15
8/20
8/25
8/30
9/5
9/10
9/15
9/20
9/25
9/30
10/5
10/10
10/15
10/20
10/25
10/30
11/5
11/10
11/15
11/20
11/25
11/30
12/5
12/10
12/15
12/20
12/25
12/30

(cont'd)

<u>Conduit No.</u>	<u>Fire Rating</u>	<u>Sq. Ft. of Raceway To Be Protected</u>	<u>Location</u>	<u>% Completion Status</u>
16254B	1 HR	44	CB e1 286' - 0"	50%
16254C	1 HR	79	CB e1 286' - 0"	86%
16260C	3 HR	56	RAB e1 286' - 0"	99%
16263P	1 HR	68	CB e1 286' - 0"	49%
16277Y	3 HR	57	RAB e1 286' - 0"	99%
17012P	1 HR	2	RAB e1 261' - 0"	100%
17012Q	1 HR	22	RAB e1 261' - 0"	100%
17084W	1 HR	22	RAB e1 261' - 0"	100%
17134M	1 HR	53	CB e1 286' - 0"	100%
17153Y	1 HR	148	RAB e1 261' - 0"	63%
17179F	3 HR	72	RAB e1 286' - 0"	99%

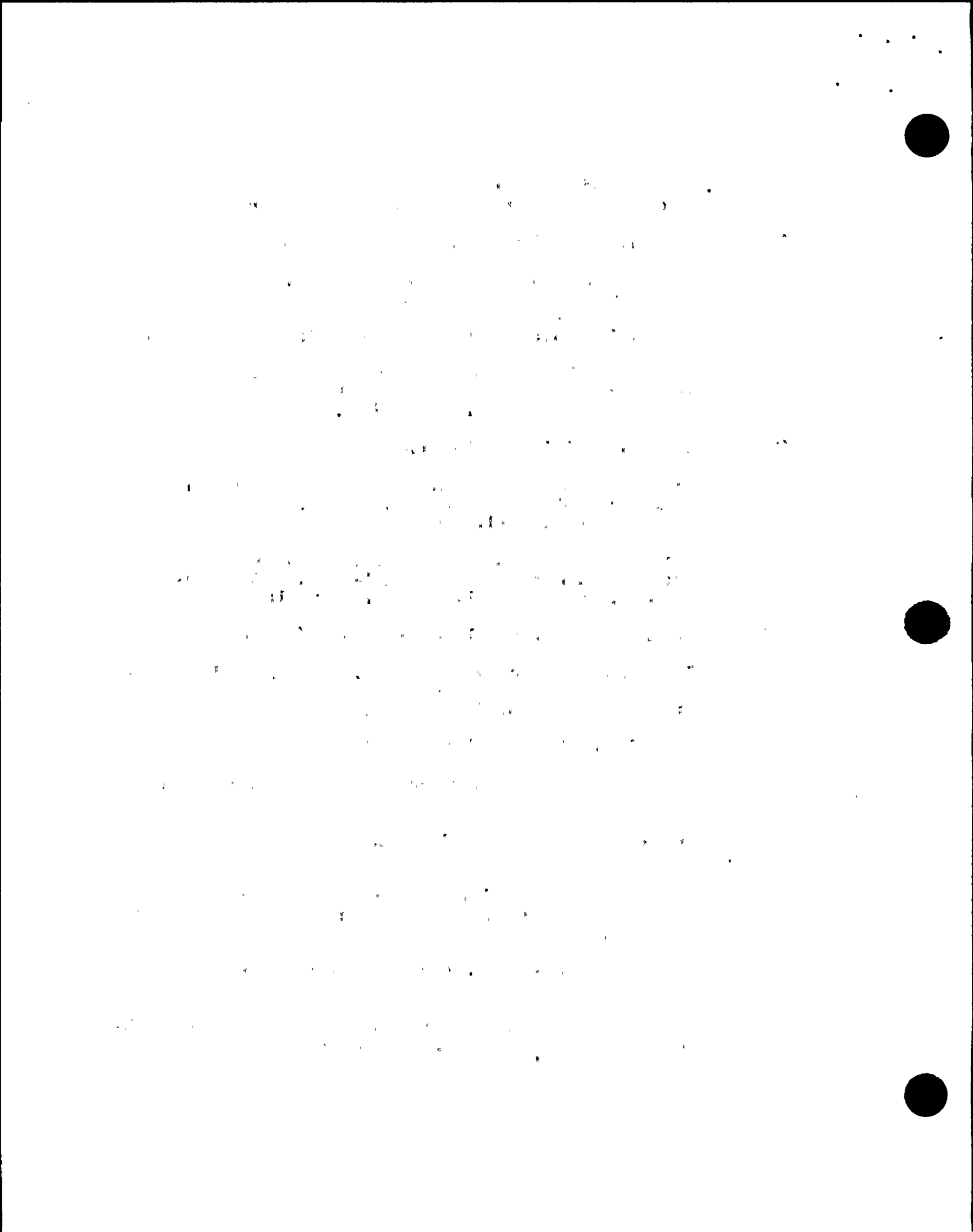
The licensee indicated that upon completion of the raceway fire barrier program that 28,744 square feet of raceway will be protected by a one-hour fire barrier wrap and that 9,412 square feet of raceway will be protected by a three-hour fire barrier wrap.

b. Status of Completion and Walkdown of Fire Area Fire Barrier Boundaries

The inspector assessed the current completion status of the fire area fire barriers by performing a walkdown of selected fire area fire

barriers. The following summarizes the incomplete fire protection features associated with the inspected fire area fire barriers:

- (1) Reactor auxiliary building elevation 190' 0" (Fire Area 1-A-Ba1)
 - Two-hour fire barrier enclosure around north stairwell penetration seals not complete.
- (2) Reactor auxiliary building elevation 236' 0" (Fire Area 1-A-Ba1)
 - Three-hour fire barrier wall located along column line 43 from columns B-L is not completed. The fire door and penetration seals are not fully installed.
- (3) Reactor auxiliary building elevation 261' 0" (Fire Area 1-A-Ba1)
 - Three-hour fire barrier wall located along column line 43 from column B-L is not completed. The fire door and penetration seals are not fully installed.
 - Three-hour fire barrier floor slab separating reactor auxiliary building elevations 236'- 0" from 26' 0" is not complete. The penetration seals are not fully installed.
- (4) Reactor Auxiliary Building Elevation 261'- 0" (Fire Area 1-A-EPA)
 - Three-hour fire barrier walls enclosing electrical penetration area "SA" are not complete. The fire doors and penetration seals are not fully installed.
- (5) Reactor Auxiliary Building Elevation 261'- 0" (Fire Area 1-A-EPB)
 - Three-hour fire barrier floor slab is not complete. The penetration seals are not fully installed.
- (6) Reactor Auxiliary Building Elevation 286' 0" (Fire Area 1-A-SWGR-A)
 - Three-hour barrier walls enclosing the "A" train switchgear room are not complete. The penetration seals are not fully installed.
- (7) Reactor Auxiliary Building Elevation 286' 0" (Fire Area 1-A-SWGR-B)
 - Three-hour fire barrier walls enclosing the "B" train switchgear room are not complete. The fire doors and penetration seals are not fully installed.



(8) Control Building Elevation 305' 0" (Fire Area 12-A-CR)

- ° Three-hour fire barrier floor slab in the control room is not complete. The penetration seals are not fully completed.

The licensee indicated that, as of July 18, 1986, there were 1,796 fire barrier penetration seals remaining to be installed.

c. Status of Completion and Walkdown of Automatic Sprinkler Protection

The inspector performed a walkdown of the automatic sprinkler protection being installed in the following plant areas/fire zones:

(1) Diesel Generator Building

- ° Diesel Generator Rooms
- ° Diesel Fuel Day Tank Rooms

(2) Diesel Oil Storage Tank Area

(3) Reactor Auxiliary Building

- ° Elevation 190' - 0" RHR Pump Area - Fire Zones 1-A-1-PA and 1-A-1PB
- ° Elevation 216' - 0" Fire Zones 1-A-2-MP
- ° Elevation 236' - 0" Fire Zones 1-A-3-MP, 1-A-3-PM, 1-A-3-COM 1, 1-A-3-COM E, 1-A-3-DOM B, and 1-A-3-COR
- ° Elevation 261' - 0" Fire Zones 1-A-EPA, 1-A-EPB, 1-A-4-CHLR, 1-A-COM B, 1-A-4-COM E, 1-A-4-COM I, 1-A-CHFB, and 1-A-4-CHFA

The layout and the placement of the sprinkler heads within the areas inspected appeared to be adequate. The subject sprinkler systems, upon completion, should be capable of providing sufficient fire control in the event that an exposure fire was to occur.

6. Inspector Followup Items (IFI)

The licensee's actions associated with the following IFIs were reviewed:

- a. (Closed) IFI (400/85-40-02), Revisions Required to Fire Protection/Prevention Procedures in Order to Meet NRC Guidelines. The licensee has revised procedure FPP-001, Fire Protection - Conduct of Operation, Section 5.19 to incorporate the necessary restrictions on smoking in safety-related areas of the plant. In addition, the licensee revised

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several paragraphs and is mostly obscured by noise and low contrast.

TI-105 Fire Protection Training, Section 3.2.3 to require that each fire brigade team will be drilled at a frequency of at least once per calendar quarter, with the interval not to exceed 92 days. The licensee also revised Section 3.2.5 of Procedure TI-105 to allow responses to actual fires, if properly critiqued, to be documented as one drill per year per shift team. Therefore, it appears that the subject procedure revisions meet the intent of the NRC Fire Protection/Prevention Guidelines with respect to smoking restrictions and fire brigade drill frequency. On that basis, this item is considered to be closed.

- b. (Closed) IFI (400/85-40-06), Fire Brigade Equipment and Storage Lockers are Required to be Provided Prior to Fuel Load. The licensee has implemented the fire brigade equipment staging area in the turbine building on elevation 261' - 0". Therefore, this item is closed.
- c. (Closed) IFI (400/85-40-11), Re-evaluation of Sprinkler System Obstructions. The NRC identified, during the May 5, 1986, NRC Fire Protection Audit areas in the Reactor Auxiliary Building where overlapping sprinkler obstructions were not addressed. These obstructions occur where elements (ductwork, pipe, cable tray, etc.) in combination exceed the 48" single element width specified in NFPA 13.

In order to identify the areas where these types of obstructions occurred, the licensee organized a walkdown team. This team consisted of individuals from the sprinkler design, safe shutdown, hanger design, detection design and 1.29 analysis groups.

The licensee's walkdown identified sprinkler obstructions on elevations 216, 236 and 261 of the Reactor Auxiliary Building. The major obstructions were in the areas of the access aisles. Some obstructions existed above safe shutdown equipment on elevation 261. The original sprinkler design had identified some single 48" obstructions in which additional heads were added below the obstructions to provide adequate coverage. In some cases, these heads were utilized for overlapping obstructions.

After the walkdown, the licensee issued approximately 50 field modifications to provide additional sprinkler coverage. The following is a summary of the subject sprinkler system modifications:

Additional Sprinkler Heads	<u>Elev.</u>	<u>216</u>	<u>236</u>	<u>261</u>
	<u>Total</u>	<u>6</u>	<u>39</u>	<u>55</u>
Additional Sprinkler Pipe		1400 Ft.		
Additional Seismic Supports		70		
Additional Non-seismic Supports		150		

This item is closed.

- d. (Closed) IFI (400/85-40-15), Review of Completed Fire Detection System Inspections and Pre-operational Tests. The licensee implemented a complete fire detection system walkdown of safe shutdown plant areas in order to determine the adequacy of the placement and layout of ionization, thermal and ultra-violet fire/smoke detection devices.

As a result of these walkdowns under Field Change Request (FCR) I-2791, the licensee added two additional thermal detectors and relocated 12 thermal and reoriented the ultra-violet detectors in the Diesel Generator Building.

In addition, the licensee has instituted their fire Detection System Start-up and Pre-operational Test Program. This program is described in Startup Manual V, Test Nos. 1-6180-P-01, P-02, P-03, P-04, and P-05. Pre-operational tests for fire detection for outlying structures, as outlined by pre-operational Test No. 1-6108-P-01 was completed on July 18, 1986.

Currently, the remaining fire detection system pre-operational tests are in progress and will be completed prior to fuel load. Therefore, this item is closed.

- e. (Closed) IFI (400/86-26-01), Verification of Design and Procedural Changes Required to Maintain RCP Seal Integrity in the Event of Fire. In order to assure that a spurious signal will not preclude RCP seal flow in the event of a control room fire, the licensee implemented FCR I-3343. This FCR performed a design change which assures valve 2CC-V191SA located inside containment will fail open upon transferring the valve circuit to the auxiliary control panel. FCR I-3343 was completed on May 15, 1986, and abnormal operating procedure (AOP) -004, Safe Shutdown in Case of Fire or Control Room Inaccessibility, was revised appropriately by the licensee to outline the necessary manual operator action required to maintain RCP seal integrity. This item is closed.
- f. (Closed) IFI (400/86-26-05), Failure of Fire Brigade to Demonstrate Proper Manual Firefighting Techniques During a Fire Drill. The inspector, during the June 3-6, 1986 inspection, witnessed two unannounced fire brigade drills. The firefighting techniques utilized by the brigade during these drills were found to be satisfactory. In addition, during this inspection, the inspector reviewed the fire brigade drill critiques for drills 86-2-A, 86-2-B, 86-2-C, 86-2-D and 86-3-E and were found to be satisfactory with respect to the firefighting techniques utilized by the fire brigade. Therefore, this item is closed.
- g. (Closed) IFI (400/86-42-02), Review Completed Installation Work for Redundant Fuses. IE Information Notice 85-09, Isolation Transfer Switches and Post-Fire Shutdown Capability, was issued January 31, 1985. This Notice identifies a potential problem concerning fuses in control circuits that are common for operation of equipment from the

The first part of the report deals with the general situation in the country. It is noted that the economy is still in a state of stagnation and that the government has failed to implement the necessary reforms. The situation is described as one of deep crisis and the need for urgent action is stressed.

The second part of the report discusses the political situation. It is noted that the government is weak and lacks the support of the people. The opposition is growing and the situation is becoming increasingly unstable. It is suggested that a new government should be formed as a matter of urgency.

The third part of the report deals with the social situation. It is noted that the population is suffering from poverty and unemployment. The social services are inadequate and the situation is becoming increasingly desperate. It is suggested that the government should take steps to improve the social services and to create jobs.

The fourth part of the report discusses the international situation. It is noted that the country is isolated and lacks the support of the major powers. The situation is described as one of deep crisis and the need for international assistance is stressed.

The fifth part of the report deals with the military situation. It is noted that the army is weak and lacks the necessary equipment and training. The situation is described as one of deep crisis and the need for military assistance is stressed. It is suggested that the government should take steps to strengthen the military and to improve the training of the troops.

The sixth part of the report discusses the economic situation. It is noted that the economy is in a state of deep crisis and that the government has failed to implement the necessary reforms. The situation is described as one of deep crisis and the need for urgent action is stressed. It is suggested that the government should take steps to improve the economy and to create jobs.

The seventh part of the report deals with the political situation. It is noted that the government is weak and lacks the support of the people. The opposition is growing and the situation is becoming increasingly unstable. It is suggested that a new government should be formed as a matter of urgency.

Control Room and Alternate Hot Shutdown area. A fire in the Control Room could cause these common fuses to blow before transfer is made to the Alternate Hot Shutdown area. If the control circuit is needed at the Alternate Shutdown area to energize a piece of equipment and if the fuse(s) blew before transfer, equipment would not be operable without replacing the blown fuse(s). Under FCR-I-3220, I-3199, I-3245 and FCR-E-5865, the licensee installed double fusing to diesel generator engine control panel 1A-SA and 1B-SB to protect against spurious tripping of the diesel generator breakers. The licensee on June 24, 1986, had fully completed the work associated with these FCRs, therefore, this item is closed.

- h. (Closed) IFI (400/86-42-05), Inadequate Fire Response Methods Utilized by the Fire Brigade. The licensee has implemented the permanent fire brigade staging area in this turbine building on Elevation 261' - 0". On the staging area wall, they have incorporated quick response mounts for the fire brigade's self-contained breathing apparatus, and turnout gear racks for the on-duty fire brigade's personal protective fire-fighting equipment. Also, the licensee's fire protection staff is in the process of developing quick response equipment carts similar to the Perry Design. In addition, until the permanent carts are completed, the licensee's staff has implemented temporary carts as an interim measure and has placed them in service in the fire brigade staging area. The licensee intends to have the permanent carts in place and have them staged in various RAB locations and in the fire brigade staging area prior to fuel load. Therefore, this item is closed.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The text notes that without reliable records, it would be difficult to track the flow of funds and identify any irregularities.

2. The second part of the document outlines the specific procedures for recording transactions. It details the steps involved in the accounting process, from the initial recording of a transaction to the final preparation of financial statements. The text stresses the need for consistency and accuracy in the recording process, as well as the importance of regular audits to ensure the reliability of the records. It also mentions the role of internal controls in preventing errors and fraud.