

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8605010299 DOC. DATE: 86/04/25 NOTARIZED: NO DOCKET #  
 FACIL: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250  
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251  
 AUTH. NAME AUTHDR AFFILIATION  
 WOODY, C. O. Florida Power & Light Co.  
 RECIP. NAME RECIPIENT AFFILIATION  
 THOMPSON, H. L. Division of Pressurized Water Reactor Licensing - A (post 8

SUBJECT: Requests four exemptions to 10CFR50, App R Sections  
 III.G.2.a, III.G.2.b & III.G.2.d requirements, including fire  
 barrier separating Fire Area AAA from Fire Area A & fire  
 detection in outdoors zones.

DISTRIBUTION CODE: A006D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 19  
 TITLE: OR Submittal: Fire Protection

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PWR-A PD2 PD 01	3 3	McDONALD, D	1 1
INTERNAL:	ADM/LFMB	1 0	ELD/HDS4	1 0
	IE WHITNEY, L	1 1	NRR BWR DIR	1 1
	NRR PWR-A DIR	1 1	NRR PWR-B DIR	1 1
	NRR STANG, J 07	2 2	NRR WERMEIL, J06	1 0
	NRR/DHFT DIR	1 1	<u>REG FILE</u> 04	1 1
	RGN2	1 1		
EXTERNAL:	24X	1 1	LPDR 03	1 1
	NRC PDR 02	1 1	NSIC 05	1 1

*w/check \$150.00  
 #0988*

TOTAL NUMBER OF COPIES REQUIRED: LTTR 20 ENCL 17

1942

1. [Illegible text]

2. [Illegible text]

3. [Illegible text]

4. [Illegible text]

5. [Illegible text]

6. [Illegible text]

7. [Illegible text]

8. [Illegible text]

9. [Illegible text]

10. [Illegible text]

[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]	[Illegible]
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102



APR 25 1988

L-86-164

Office of Nuclear Reactor Regulation
Attention: Mr. Hugh L. Thompson, Jr., Director
Division of PWR Licensing - A
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Thompson:

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Exemption Request - Fire Protection

Florida Power & Light Company has identified the need for certain technical exemptions related to 10 CFR 50 Appendix R requirements at our Turkey Point facility.

The technical exemptions relate to the following areas:

- Attachment 1: Appendix R Section III.G.2.a
Fire Barrier Separating Fire Area AAA from Fire Area A
Attachment 2: Appendix R Section III.G.2.a
Fire Barrier Separating Fire Area F from Fire Area A
Attachment 3: Appendix R Section III.G.2.b
Fire Detection and Suppression in Outdoor Zones
Attachment 4: Appendix R Section III.G.2.d
Intervening Combustibles Inside Containment

As detailed in the attached specific exemption requests and pursuant to 10 CFR 50.12, FPL requests exemptions to 10 CFR 50 Appendix R Section III.G.2, requirements for Turkey Point Units 3 and 4.

In accordance with 10 CFR 170, FPL Check No. 0988 is attached.

Yours very truly,

C. O. Woody
Group Vice President
Nuclear Energy

8605010299 860425
PDR ADOCK 05000250
F PDR

COW/GRM/gp
Attachments
cc: Dr. J. Nelson Grace, Region II, USNRC
Harold F. Reis, Esquire, Newman & Holtzinger

Handwritten notes: A006 w/ check \$150.00 #0988



Handwritten notes in the bottom left corner, including the word "The" and some illegible characters.

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Exemption Request - Fire Protection

L-86-164

ATTACHMENT I



FIRE BARRIER SEPARATING FIRE AREA AAA (FIRE ZONE 24)  
FROM FIRE AREA A (FIRE ZONES 4 AND 5)  
TURKEY POINT UNITS 3 & 4

Exemption Request

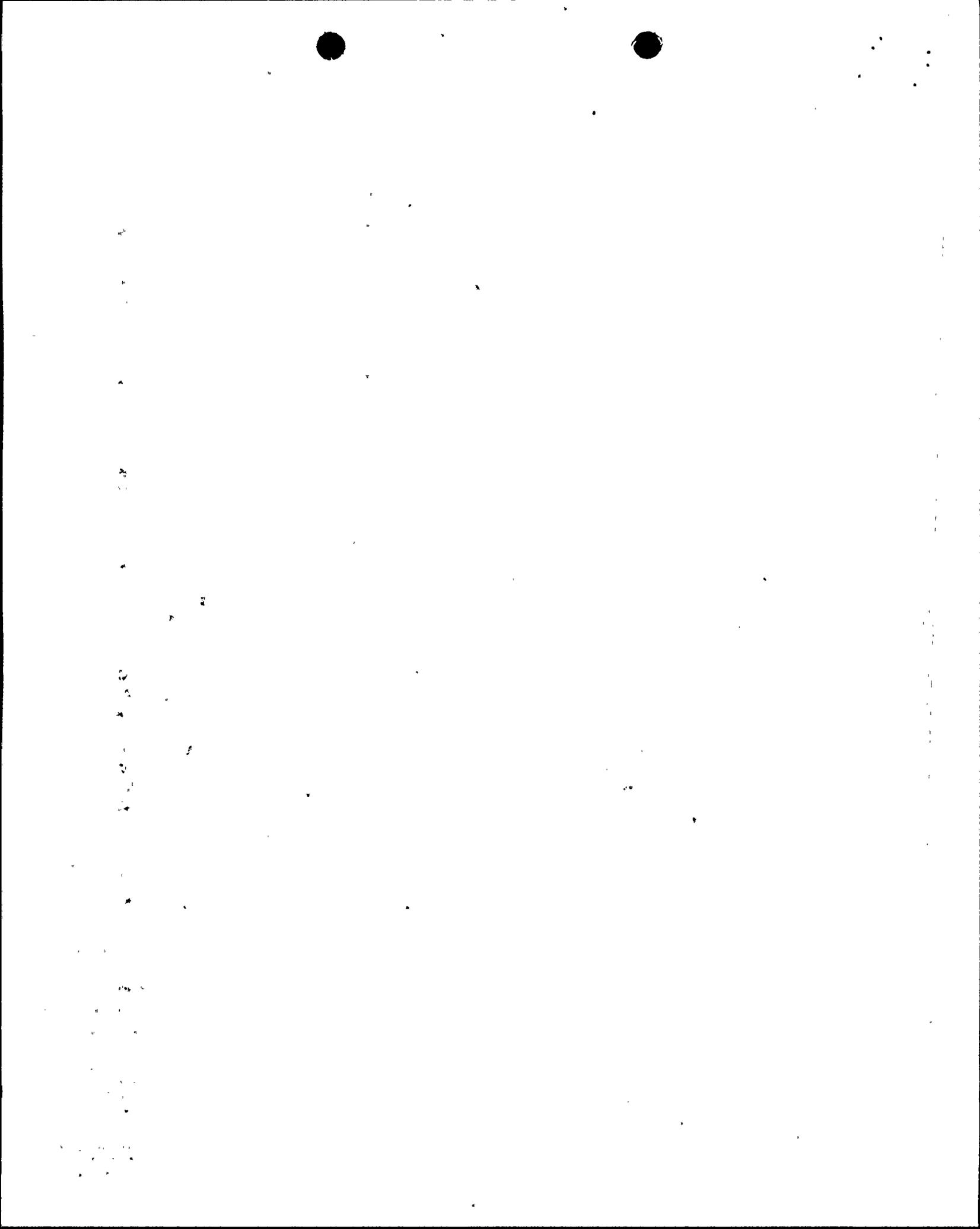
Pursuant to 10 CFR 50.12, FPL requests exemption from the provisions of Section III G.2.a of Appendix R to 10 CFR 50 that requires separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a 3-hour rating.

Specifically, exemption is requested from providing 3-hour rated penetration seals in the fire barrier separating the Gas Decay Tank Room (Fire Area AAA - Fire Zone 24) from the Auxiliary Building Corridor (Fire Area AAA - Fire Zone 4), and the Chemical Drain Tank Room, Laundry and Hot Shower Tank Room ( Fire Area A - Fire Zone 5).

Justification for Exemption

Fire Zone 24 and Fire Zones 4 and 5 are located in the Auxiliary Building at elevations 18' - 0" and 10' - 0" respectively, as shown on Figures 1 and 2. The floor separating these zones is considered a fire barrier by definition, in that it serves to separate defined fire areas (Fire Areas AAA and A). To satisfy the specific requirements of Appendix R, Section III G.2.a, access to these zones would be required for the installation of 3-hour rated penetration seals. However, because fire zone 24 is classified as "Locked High Radiation Areas" with radiation levels on the order of 20 Rem/hour during various modes of plant operation, access to this zone for the installation of penetration seals is considered highly undesirable and inconsistent with regulatory requirements for maintaining radiation exposures as low as reasonably achievable (ALARA) for the following reasons:

- o Construction estimates indicate that approximately 20 hours would be required in these zones for construction and quality control personnel to prepare, install and inspect the penetration seals. With the radiation levels in the work areas on the order of 20 Rem/hour, the resulting radiation exposure would be significant.
- o Because of the high radiation levels, the potential would exist for personnel to receive radiation exposures in excess of 10 CFR 20 limits.
- o Although temporary shielding could be provided to reduce the radiation levels in the work areas, the installation of such shielding is in itself labor intensive and would result in significant radiation exposure.



- o Physical inspection of each penetration seal would be required every 18 months in accordance with plant fire protection technical specifications. This would require 1 to 2 hours of inspection time resulting in additional radiation exposure. Over 20 to 30 years of plant operation, the additional radiation exposure from these inspection activities would be significant.

Therefore, it is FPL's position that the installation of penetration seals in the fire barrier separating Fire Zone 24 from Fire Zones 4 and 5 is highly undesirable and inconsistent with the principles of ALARA as defined in Section 1(c) of 10 CFR 20. Accordingly, this exemption request is justified under the provisions of Section (A)(2)(i) of 10 CFR 50.12, since application of Appendix R, Section III G.2.a. requirements to fire barriers in high radiation areas conflicts with other rules or requirements of the Commission, specifically, 10 CFR 20.

Because these fire zones, or portions thereof, are classified as "Locked High Radiation Areas", or are in Radiologically controlled areas, personnel access to these zones is strictly controlled in accordance with site radiological controls procedures. As such, the potential for significant quantities of combustible materials to accumulate in these zones is reduced. Also, the quantity of insitu combustibles in these fire zones is low, consisting primarily of a few cables, grease in valves and miscellaneous plastic materials. Therefore, any fire originating in the zones would not be expected to propagate to any significant degree or result in substantial fire damage. Also, there are no redundant safe shutdown cables in Fire Zone 24 or immediately below the fire barrier in Fire Zones 4 and 5. Therefore, a fire originating in the vicinity of the penetrations would not affect the safe shutdown capability of the plant.

In the unlikely event of a fire in these zones, there are a number of available fire protection features which would serve to ensure the safe shutdown capability of the plant. Specifically, portable fire extinguishers and fire hose stations are located throughout the plant and are available for use in these zones. Also, ionization type smoke detectors are installed in Fire Zones 4 and 5 and in Fire Zone 58 (Auxiliary Building Hallway), which is adjacent to the Gas Decay Tank Rooms. These smoke detectors, which annunciate in the Control Room would assure early detection of a fire and rapid response of the plant fire brigade. In addition, these zones are enclosed by full height concrete walls and floors which provide a considerable deterrent to fire propagation from adjacent portions of the fire area. Therefore, these fire protection features, in conjunction with the limited quantity of combustible materials, provides reasonable assurance that one train of redundant safe shutdown equipment will remain free of fire damage.

Considering the above, it is FPL's position that the installation of 3-hour rated penetration seals in the fire barrier separating Fire Zone 24 from Fire Zones 4 and 5 is not necessary to ensure the safe shutdown capability of the plant. Accordingly, this exemption is justified under the provisions of 10 CFR 50.12, Section (a)(2)(ii), since the underlying purpose of Appendix R to 10 CFR 50 is satisfied.



1  
2  
3  
4  
5

6  
7  
8  
9  
10

11  
12  
13  
14  
15

16  
17  
18  
19  
20

21  
22  
23  
24  
25

26  
27  
28  
29  
30

31  
32  
33  
34  
35

36  
37  
38  
39  
40

41  
42  
43  
44  
45

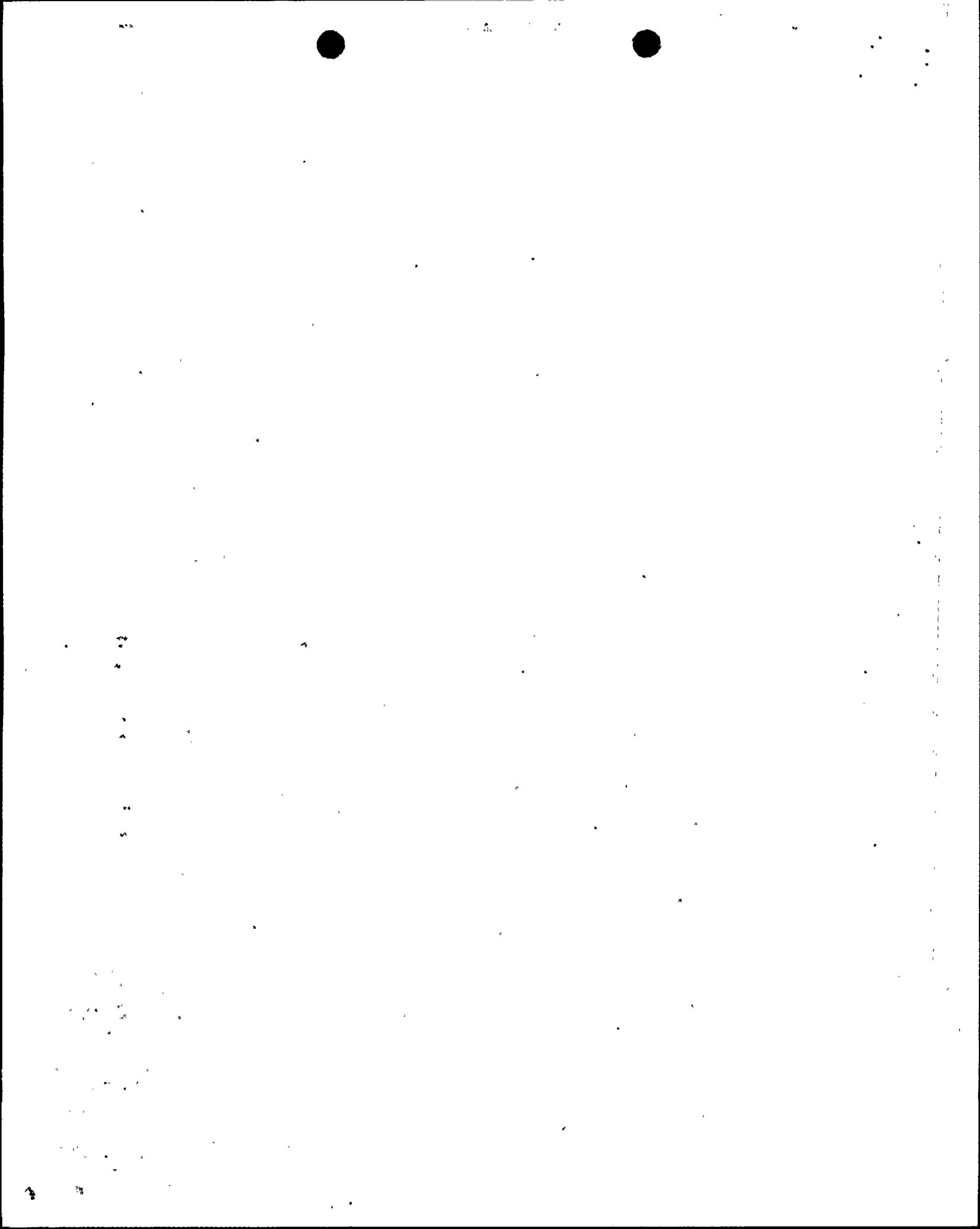
46  
47  
48  
49  
50

51  
52  
53  
54  
55

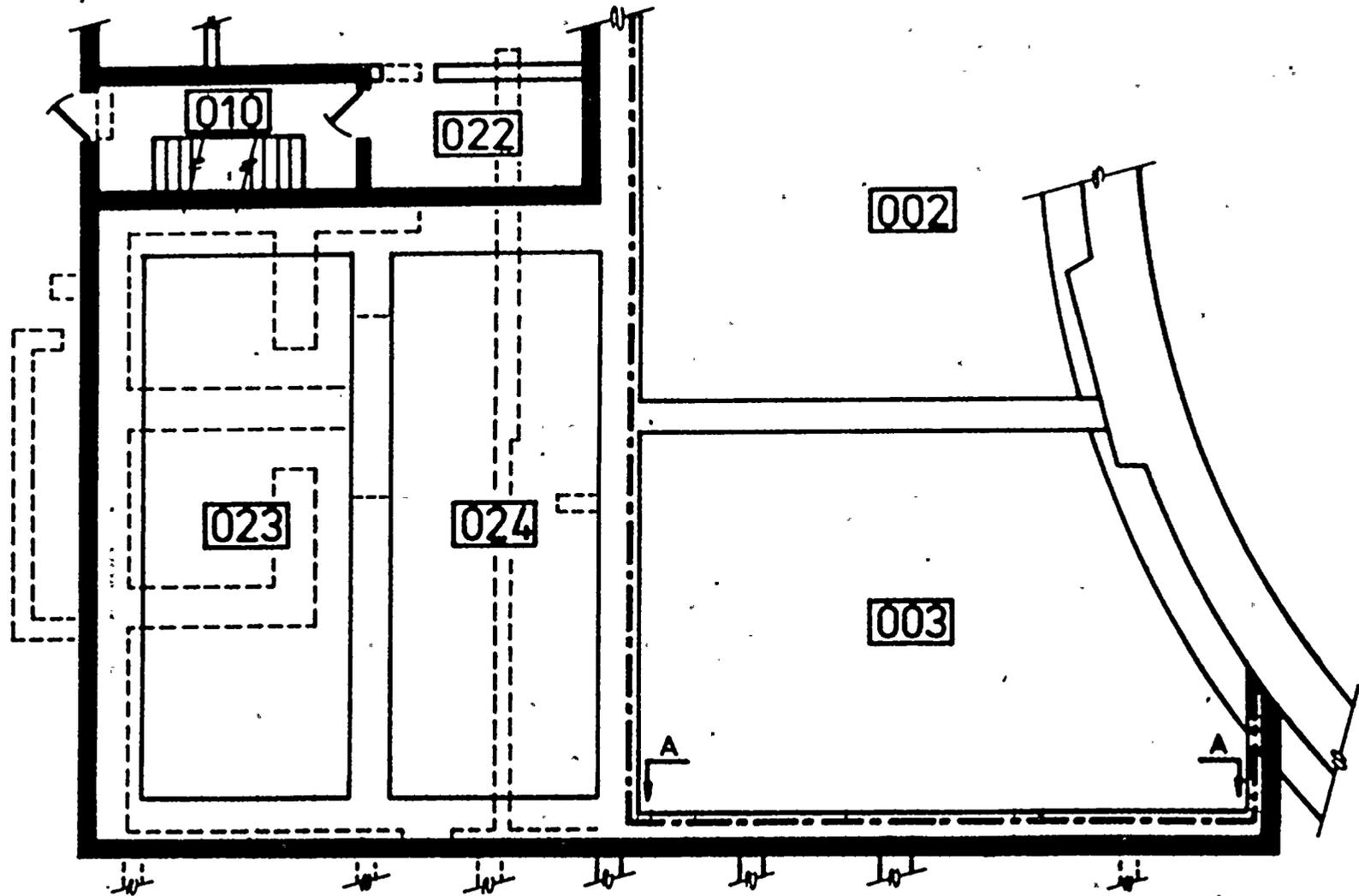
56  
57  
58  
59  
60

61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

In conclusion, it is FPL's position that the existing floor fire barrier separating Fire Zones 24 and Fire Zones 4 and 5 provides a level of protection consistent with the fire hazards, and that the installation of 3-hour rated penetration seals would not significantly add to the overall fire protection of the plant. In addition, the existing fire barrier, together with other available fire protection features provides a high degree of assurance that at least one train of redundant safe shutdown cables will remain free of fire damage. Consequently, this exemption will not result in an undue risk to the health and safety of the public, and is justified under the provisions of 10 CFR 50.12.



AUX. BLDG.  
PARTIAL PLAN EL. 18'-0"



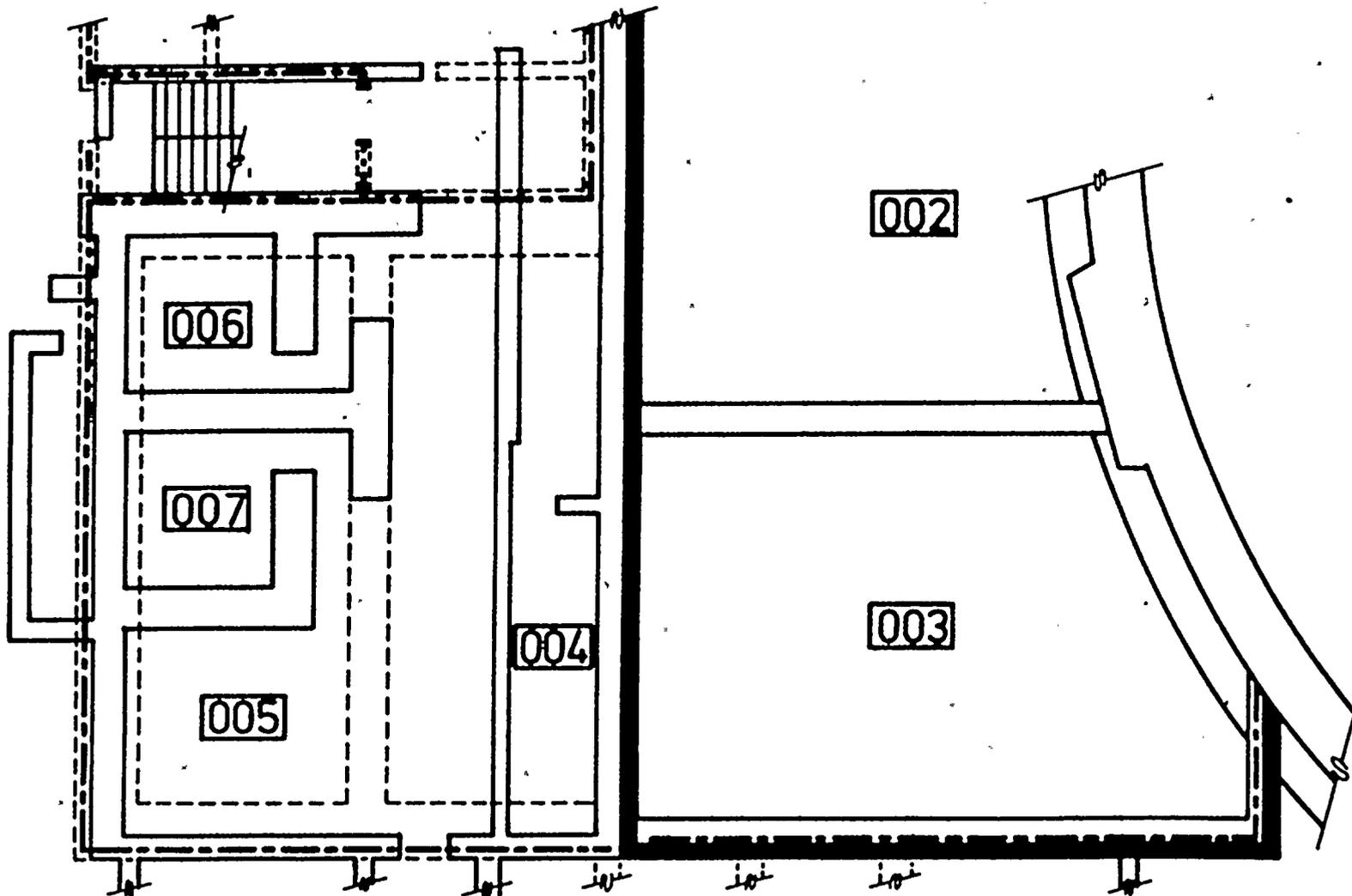
**LEGEND**

- 3-HOUR RATED FIRE BARRIER
- - -** FIRE BOUNDARY AT EL. 10'-0" & BELOW
- - -** WALL OUTLINE AT EL. 10'-0" & BELOW

**FIGURE 1**



AUX. BLDG.  
PARTIAL PLAN EL. 10'-0"



**LEGEND**  
— 3-HOUR RATED FIRE BARRIER  
- - - FIRE BOUNDARY AT EL. 18'-0"  
- - - - WALL OUTLINE AT EL. 18'-0"

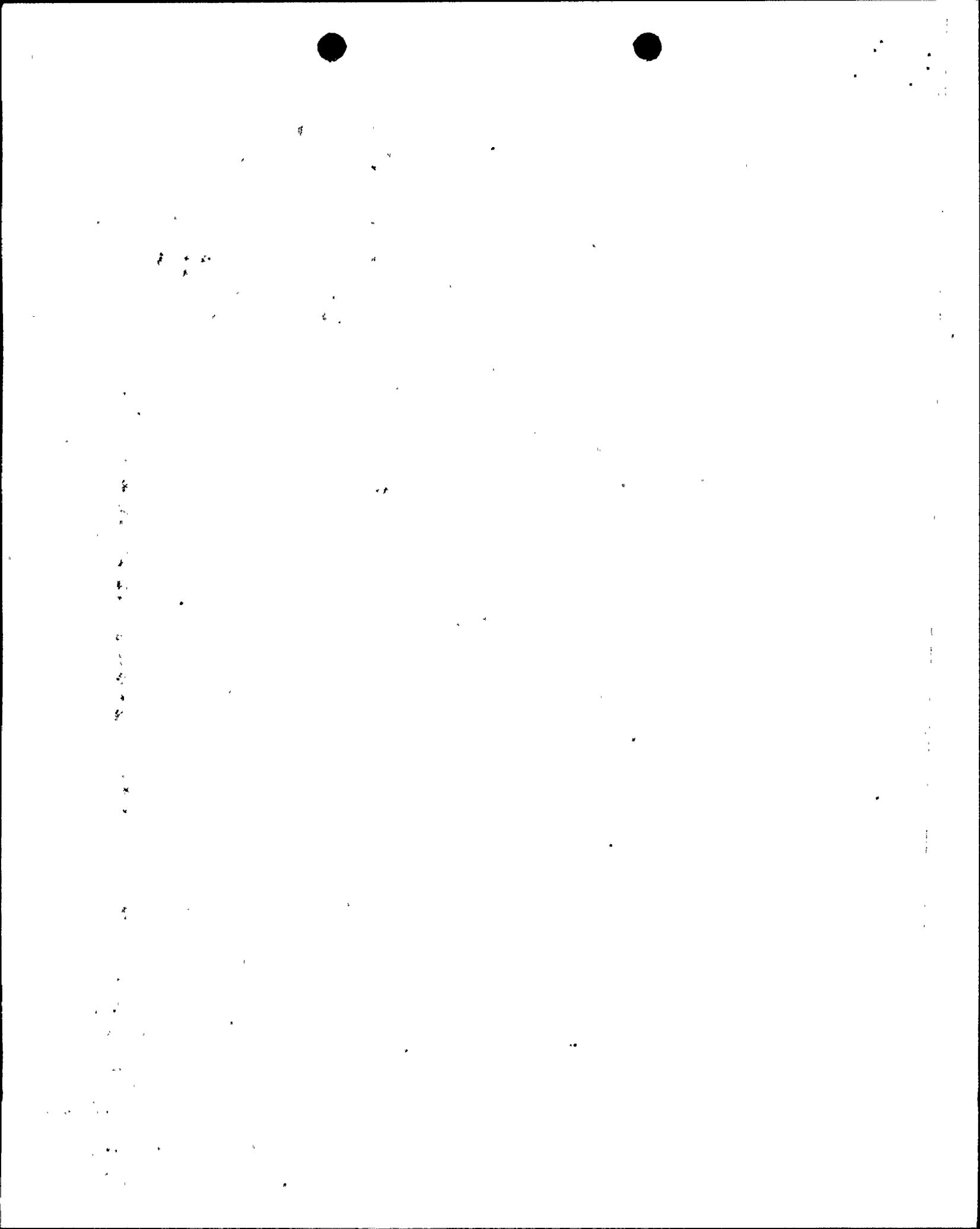
FIGURE 2

0004

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Exemption Request - Fire Protection

L-86-164

ATTACHMENT 2



FIRE BARRIER SEPARATING FIRE AREA F (FIRE ZONES 48, 49 & 50)  
FROM FIRE AREA A (FIRE ZONE 10)  
TURKEY POINT UNITS 3 & 4

Exemption Request

Pursuant to 10CFR50.12 FPL requests exemption from the provisions of Section III G.2.a of Appendix R to 10CFR50 that requires separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a 3-hour rating.

Specifically, exemption is requested from providing 3-hour rated penetration seals in the fire barrier separating the Purification and Radwaste Demineralizer Rooms (Fire Area F - Fire Zones 48, 49 and 50) from the Radioactive Pipeway (Fire Area A - Fire Zone 10).

Justification for Exemption

Fire Zones 48, 49 and 50, and Fire Zone 10 are located in the Auxiliary Building at elevations 18'0" and 10'0" respectively, as shown on Figures 1 and 2. The floor separating these zones is considered a fire barrier by definition, in that it serves to separate defined fire areas (Fire Areas A and F). To satisfy the specific requirements of Appendix R, Section III G.2.a, access to these zones would be required for the installation of 3-hour rated penetration seals. However, because these zones, or portions thereof, are classified as "Locked High Radiation Areas" with radiation levels on the order of 50 Rem/hour during various modes of plant operation, access to these zones for the installation of penetration seals is considered highly undesirable and inconsistent with regulatory requirements for maintaining radiation exposure as low as reasonably achievable (ALARA) for the following reasons:

- o Construction estimates indicate that approximately 20 hours would be required in these zones for construction and quality control personnel to prepare, install and inspect the penetration seals. With radiation levels in the work areas on the order of 50 Rem/hour, the resulting radiation exposure would be significant.
- o Because of the high radiation levels, the potential would exist for personnel to receive radiation exposure in excess of 10CFR20 limits.
- o Although temporary shielding could be provided to reduce radiation levels in the work areas, the installation of such shielding is in itself labor intensive and would result in significant radiation exposure.



•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

•  
•  
•

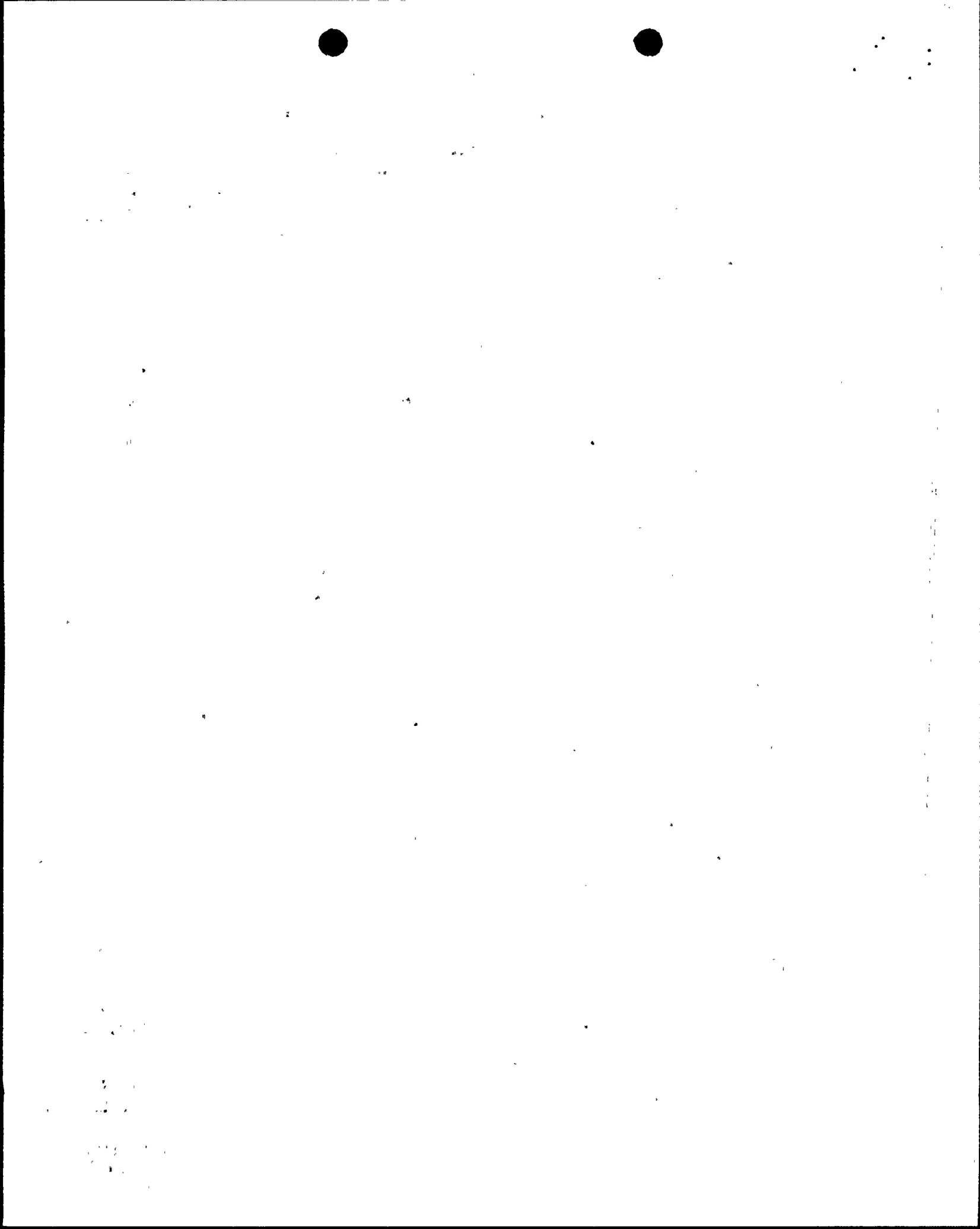
- o Physical inspection of each penetration seal would be required every 18 months in accordance with plant fire protection technical specifications. This would require 1 to 2 hours of inspection time resulting in additional radiation exposure. Over 20 to 30 years of plant operation, the additional exposure from these inspection activities would be significant.

Therefore, it is FPL's position that the installation of penetration seals in the fire barrier separating Fire Zones 48, 49 and 50 from Fire Zone 10 is highly undesirable and inconsistent with the principles of ALARA as defined in Section 1(c) of 10CFR20.

Accordingly, this exemption request is justified under the provisions of Section (a)(2)(i) of 10CFR50.12, since application of Appendix R, Section III G.2.a requirements to fire barriers in high radiation areas conflicts with other rules or requirements of the Commission, specifically, 10CFR20.

Because these fire zones, or portions thereof, are classified as "Locked High Radiation Areas", personnel access to these zones is strictly controlled in accordance with site radiological controls procedures. As such, the potential for significant quantities of combustible material to accumulate in these zones is reduced. Also, the quantity of insitu combustibles in these fire zones is low, consisting primarily of cables, grease in valves, and miscellaneous plastic materials. Therefore, any fire originating in these zones would not be expected to propagate to any significant degree or result in substantial fire damage. Also, there are no redundant safe shutdown cables in the immediate vicinity of the barrier which could be affected by fire. The nearest safe shutdown cable is located in Fire Zone 10, approximately 10 feet away from the nearest unsealed penetration and is protected by a concrete wall. There are no redundant safe shutdown circuits in Fire Zones 48, 49 or 50.

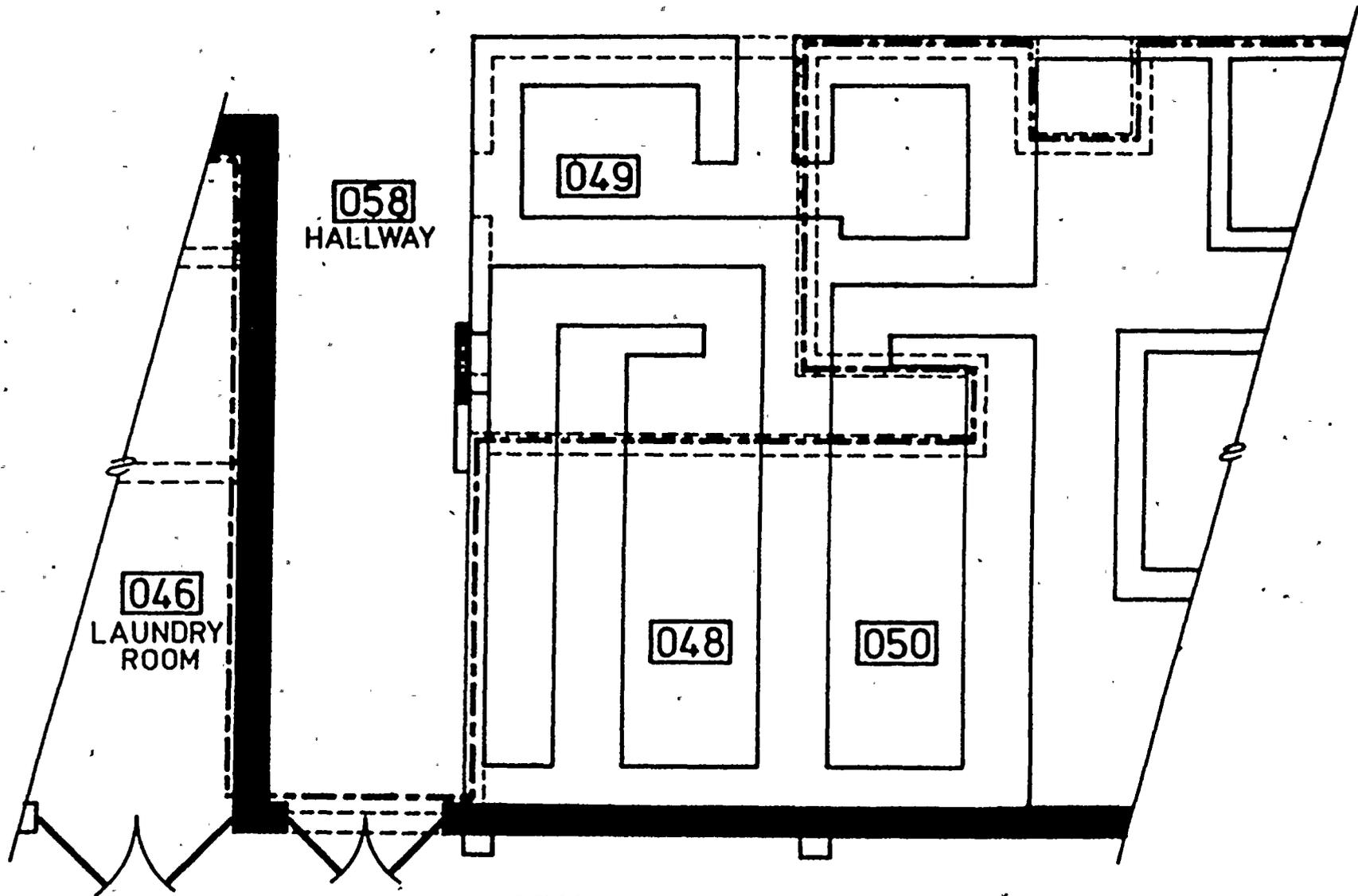
In the unlikely event of a fire in these zones, there are a number of available fire protection features which would serve to ensure the safe shutdown capability of the plant. Specifically, portable fire extinguishers and fire hose stations are located throughout the plant and are available for use in these zones. Also, ionization type smoke detectors are installed in Fire Zone 10 and Fire Zone 58 (Auxiliary Building Hallway). These smoke detectors, which annunciate in the Control Room would ensure early detection of a fire and rapid response of the plant fire brigade. In addition, these zones are enclosed by full height concrete walls and floors which provide a considerable deterrent to fire propagation from adjacent portions of the fire area. Therefore, these fire protection features in conjunction with the limited quantity of combustible materials, provides reasonable assurance that one train of redundant safe shutdown equipment will remain free of fire damage.



Considering the above, it is FPL's position that the installation of 3-hour rated penetration seals in the fire barrier separating Fire Zones 48, 49 and 50 from Fire Zone 10 is not necessary to ensure the safe shutdown capability of the plant. Accordingly, this exemption request is justified under the provisions of 10CFR50.12, Section (a)(2)(ii), since the underlying purpose of Appendix R to 10CFR50 is satisfied.

In conclusion, it is FPL's position that the existing floor fire barrier separating Fire Zones 48, 49 and 50 and Fire Zone 10 provides a level of protection consistent with the fire hazards, and that the installation of 3-hour rated penetration seals would not significantly add to the overall fire protection of the plant. In addition, the existing fire barrier, together with other available fire protection features provides a high degree of assurance that at least one train of redundant safe shutdown cables will remain free of fire damage. Consequently, this exemption will not result in an undue risk to the health and safety of the public, and is justified under the provisions of 10CFR50.12.

AUX. BLDG.  
PARTIAL PLAN EL. 18'-0"

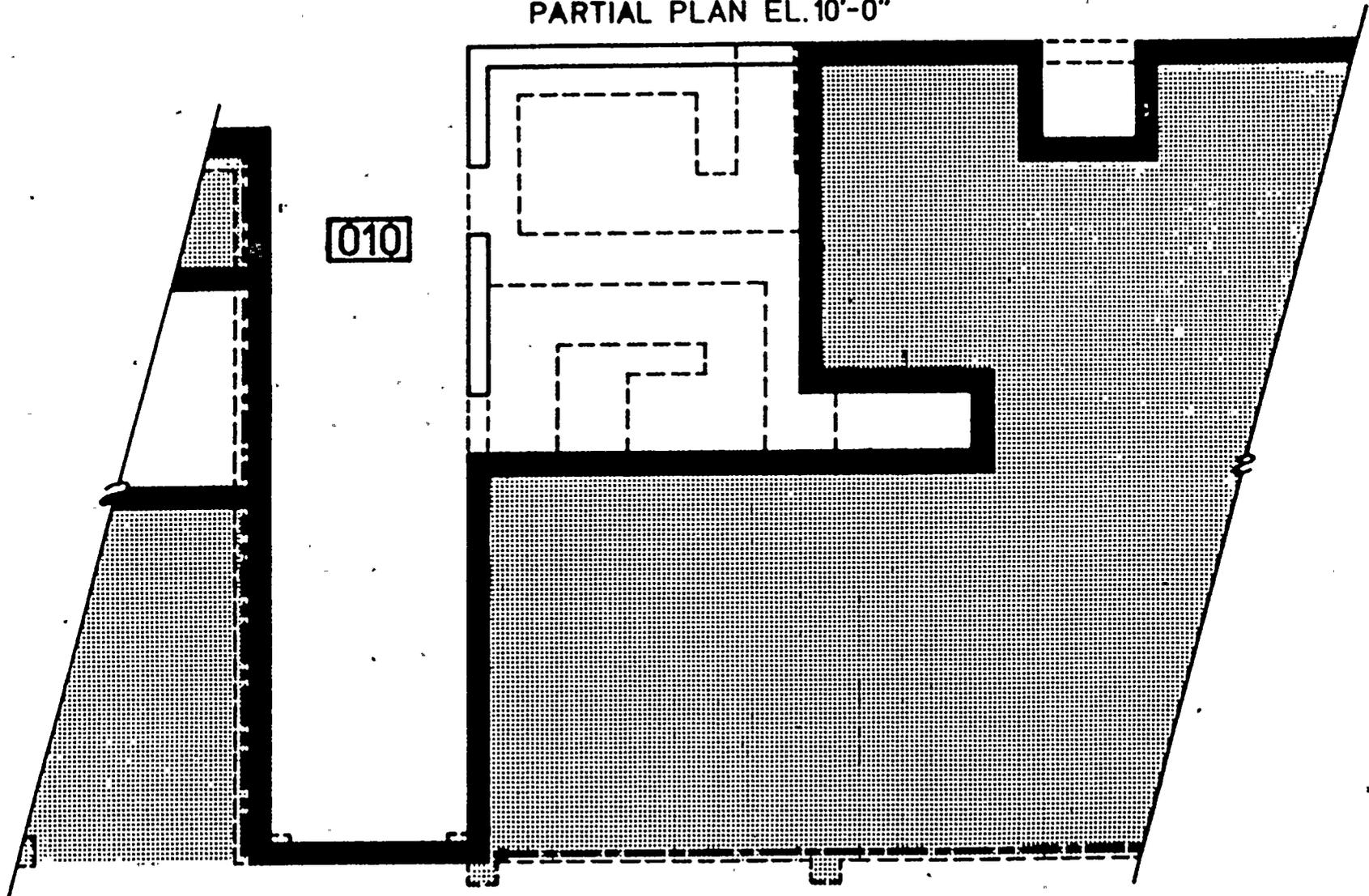


**LEGEND**

- 3-HOUR RATED FIRE BARRIER
- - - - -** FIRE BOUNDARY AT EL. 10'-0" & BELOW
- - - - -** WALL OUTLINE AT EL. 10'-0" & BELOW

**FIGURE 1**

AUX. BLDG.  
PARTIAL PLAN EL. 10'-0"



LEGEND

- 3-HOUR RATED FIRE BARRIER
- - - - FIRE BOUNDARY AT EL. 18'-0"
- - - - WALL OUTLINE AT EL. 18'-0"
- ⋯⋯⋯ EARTH FILL

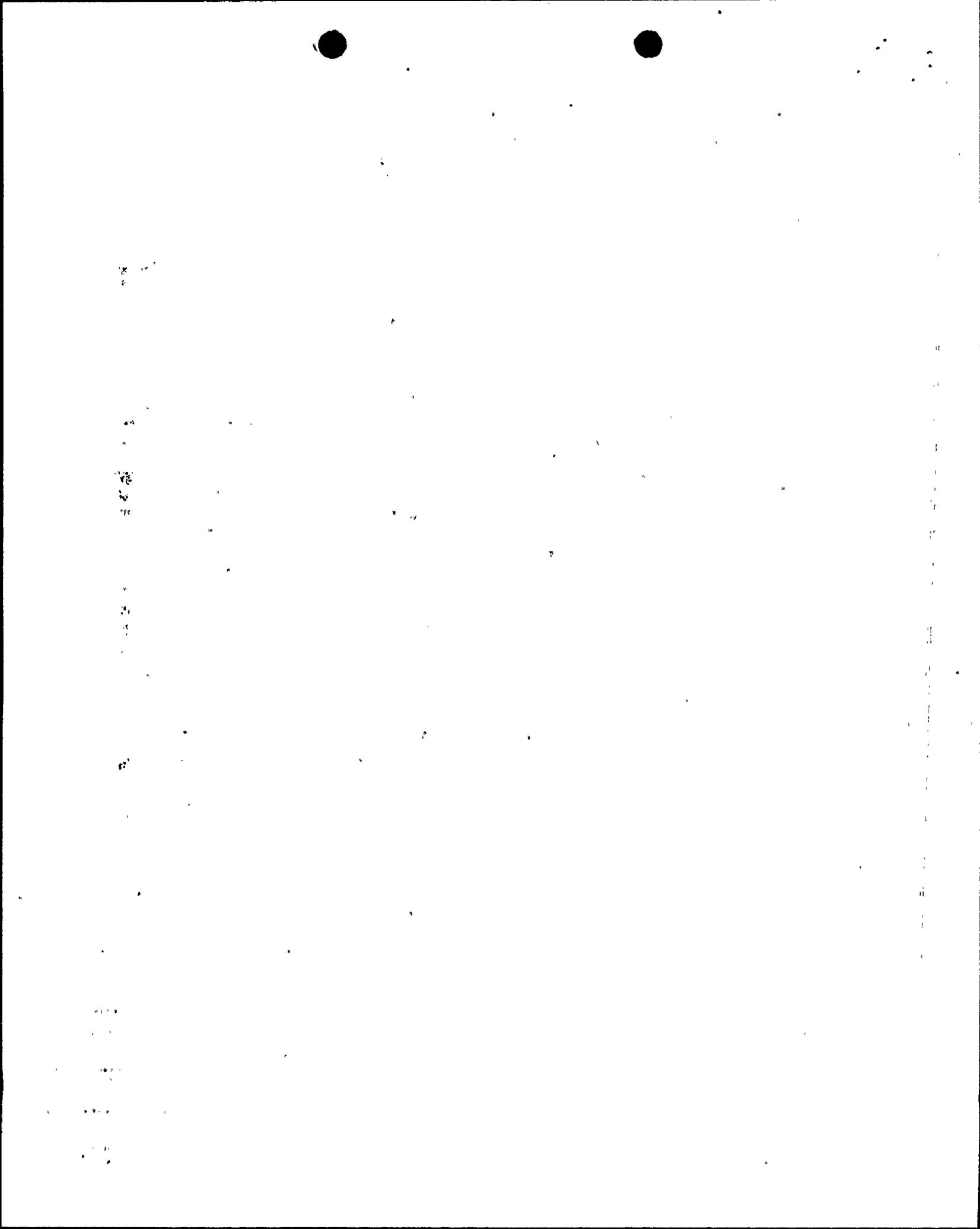
FIGURE 2



Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Exemption Request - Fire Protection

L-86-164

ATTACHMENT 3



FIRE DETECTION AND SUPPRESSION IN  
OUTDOOR FIRE ZONES  
TURKEY POINT UNITS 3 & 4

Exemption Request

1. Pursuant to 10CFR50.12, FPL requests exemption from the provisions of Section III G.2.b of Appendix R to 10CFR50 that requires fire detection and automatic fire suppression for cables and equipment and associated non-safety circuits of redundant trains that are separated by a horizontal distance of 20 feet or greater with no intervening combustibles.

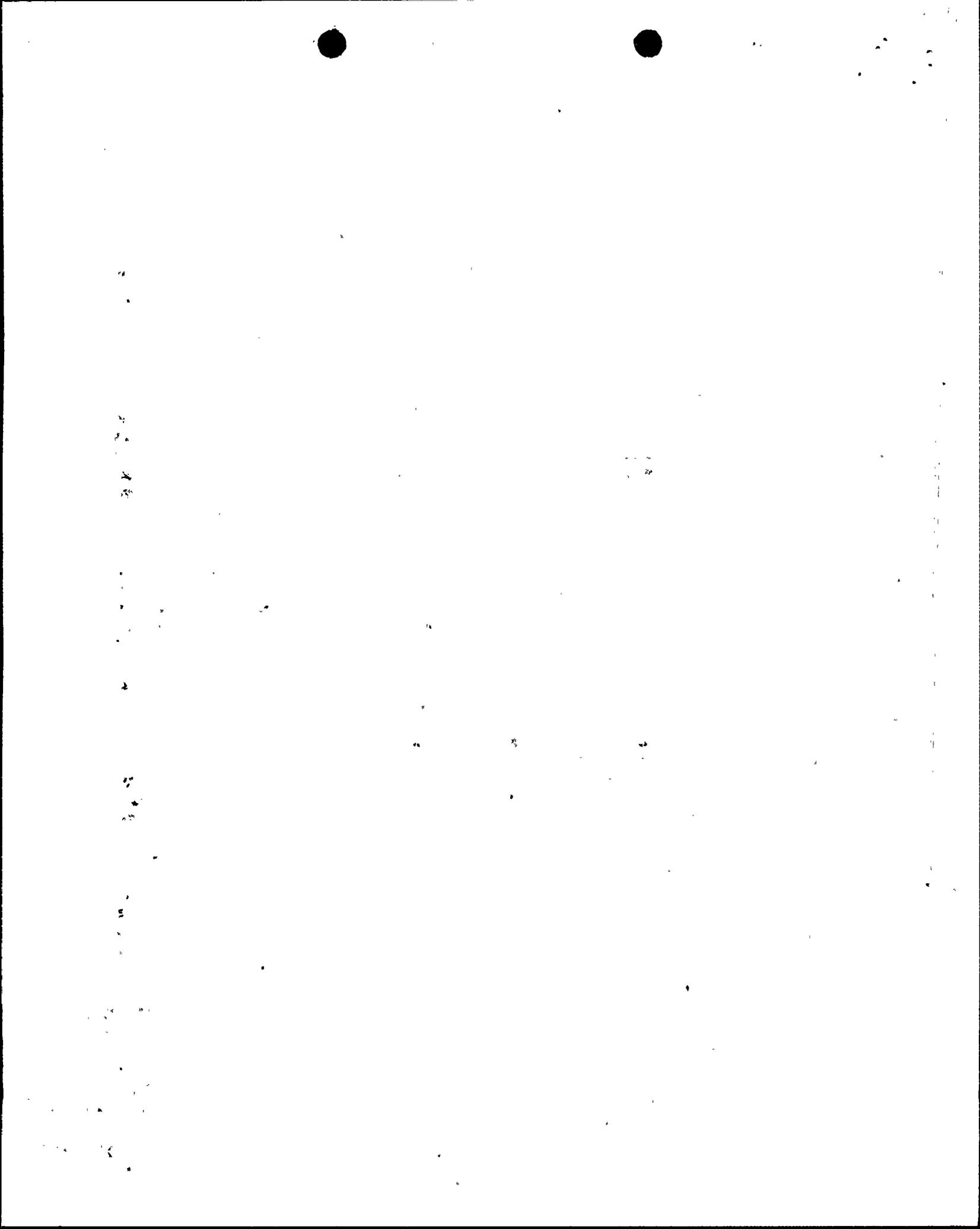
Specifically, exemption is requested from providing fire detection and automatic fire suppression throughout outdoor fire zones for the required redundant safe shutdown related cables having 20 feet or greater horizontal separation.

2. Pursuant to 10CFR50.12, FPL requests exemption from the provision of Section III G.2.c of Appendix R to 10CFR50 that requires installation of fire detection and automatic fire suppression for cables and equipment and associated non-safety circuits of one redundant train that is enclosed in a fire barrier having a one-hour rating.

Specifically, exemption is requested from providing fire detection and automatic fire suppression throughout outdoor fire zones for the required redundant safe shutdown related cables enclosed in a fire barrier having a one-hour rating where separation of 20 feet or more cannot be provided.

The following outdoor fire zones are affected:

<u>Fire Zone</u>	<u>Elevation</u>	<u>Fire Suppression</u>	<u>Description</u>
76	18'0"	Fixed Water Spray	Unit 4 Lube Oil Reservoir
77	18'0"	N/A	Unit 4 Laydown Area & Condensate Storage Area
78	18'0"	Part. Wet Pipe AS	Unit 4 Air Compressor Area
80	2'0"	N/A	Unit 4 Main Condenser
81	18'0"	Fixed Water Spray	Unit 4 Main Transformer. Unit 3 Turbine Lube Oil Unit 4 Start-up Transformer
82	18'0"	Fixed Water Spray	Unit 4 Auxiliary Transformer
83	18'0"	N/A	Unit 3 Air Compressor Area
85	2'0"	N/A	Unit 3 Main Condenser
86	18'0"	Fixed Water Spray	Unit 3 Main Transformer & Startup Transformer
87	18'0"	Fixed Water Spray	Unit 3 Auxiliary Transformer
88	18'0"	N/A	Unit 3 Ground Floor Vestibule
90	18'0"	N/A	Unit 3&4 Emergency Diesel Gen. Oil Storage Tank
91	5'0"	Part. Wet Pipe AS	Unit 4 Condensate Pump
92	5'0"	Part. Wet Pipe AS	Unit 3 Condensate Pump



105	30'0"	Part. Wet Pipe AS	Units 3&4 Turbine Building Mezzanine Deck
106R	58'6"	N/A	Control Room Roof
117	42'0"	N/A	Units 3&4 Turbine Deck
118	61'0"	N/A	Units 3&4 Auxiliary Bldg. Roof

Justification For Exemption

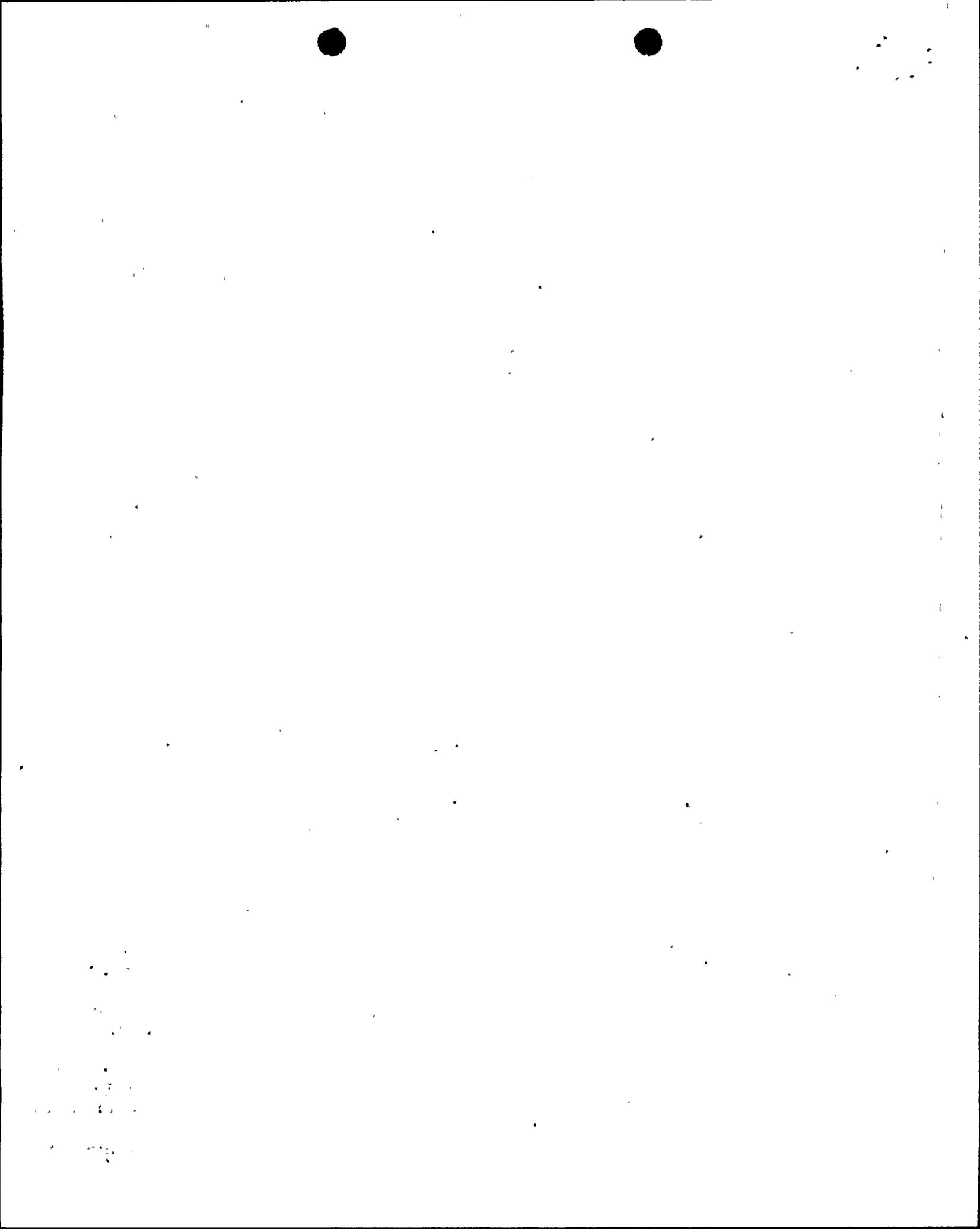
The fire zones listed above are located in outside areas or within the perimeter of the open structure Turbine Building. Essential redundant safe shutdown cables routed through these zones are separated horizontally by a minimum distance of 20 feet or are provided with one-hour rated protection where 20 feet separation cannot be maintained.

The in situ combustible inventory consists of cables routed in cable trays or combustible liquids enclosed in stationary containers (i.e., Lube Oil Storage Tanks or Main and Auxiliary Transformers). The other combustible loads in these zones are attributed to the combustible liquids and were evaluated under Appendix A to BTP 9-5.1 resulting in the addition of fixed fire suppression systems.

The in situ combustible loading contributed by the cable is considered insignificant due to the outdoor nature of these zones. Similarly, in situ combustible liquids do not represent significant threat of fire because the liquids are high flash point liquids, they are contained in containers equivalent to NFPA 30 containers and automatic fire suppression systems have been provided.

Fire protection of safe shutdown capability is provided at a number of levels. Portable fire extinguishers, hose stations and fire hydrants are provided for use in these zones. Also, the open outdoor nature of these zones would prevent the stratification of hot gases or other products of combustion from affecting redundant cables should a fire occur. In addition, the spacial separation of 20 feet or more between redundant essential cables and the provision of one-hour rated protection where 20 feet of spacial separation is not maintained assures that one train of redundant essential equipment will remain free of damage from any credible fire.

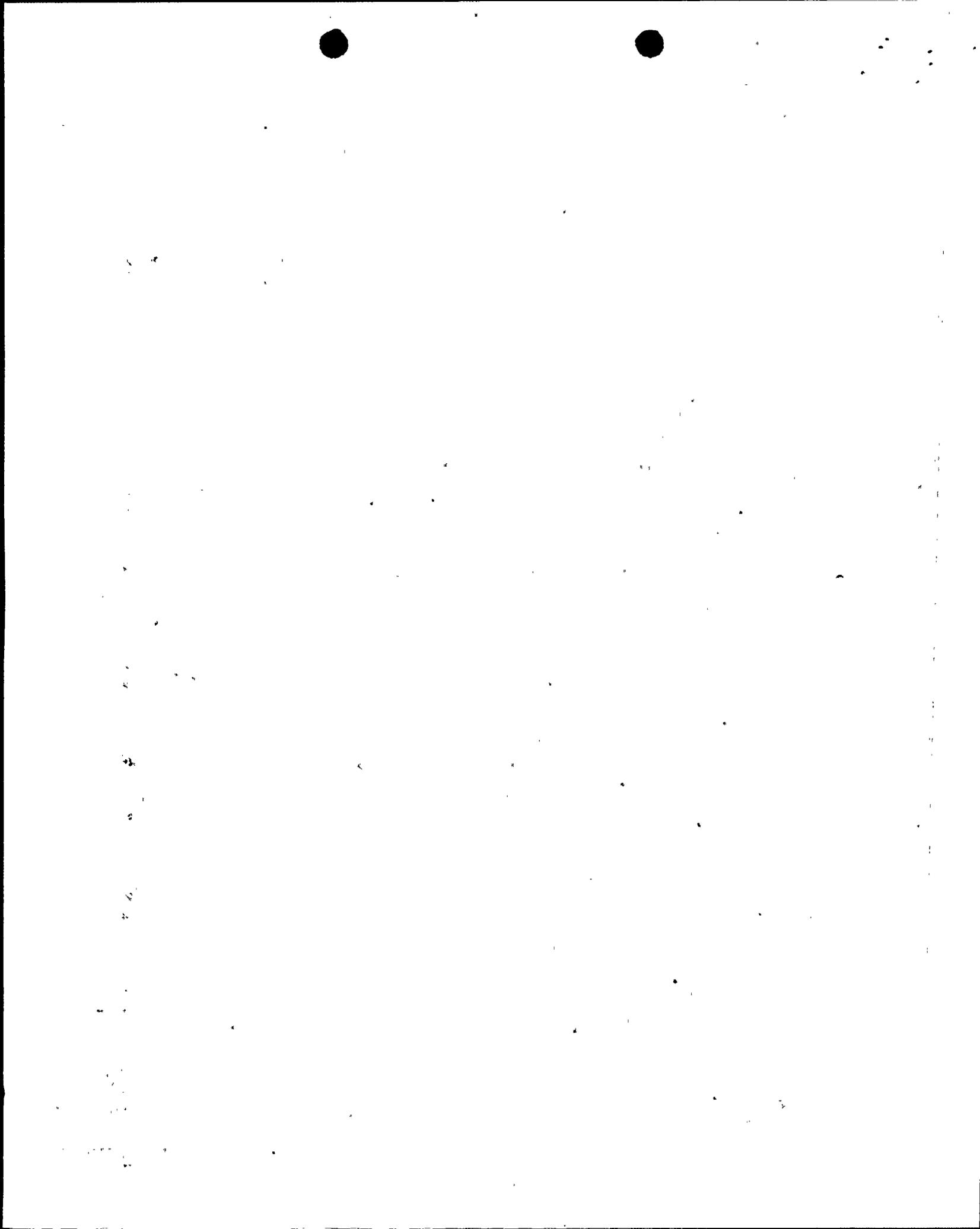
Considering the above, it is FPL's position that strict application of Appendix R, Section III G.2.b and III G.2.c requirements to the fire protection of redundant safe shutdown cables and equipment in the identified outdoor fire zones is not necessary to achieve the underlying purpose of the rule, i.e., fire protection of safe shutdown capability. Accordingly, this exemption will not result in an undue risk to the health and safety of the public and is justified under the provisions of 10CFR50.12, Section (a)(2)(ii).



Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Exemption Request - Fire Protection

L-86-164

ATTACHMENT 4



INTERVENING COMBUSTIBLES INSIDE CONTAINMENT  
TURKEY POINT UNITS 3 & 4

Exemption Request

Pursuant to 10CFR50.12, FPL requests exemption from the provisions of Section III G.2.d of Appendix R to 10CFR50 that requires separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards.

Specifically, exemption is requested for intervening combustibles inside the primary containment for each of Turkey Point Units 3 and 4 (Fire Areas Q and P respectively).

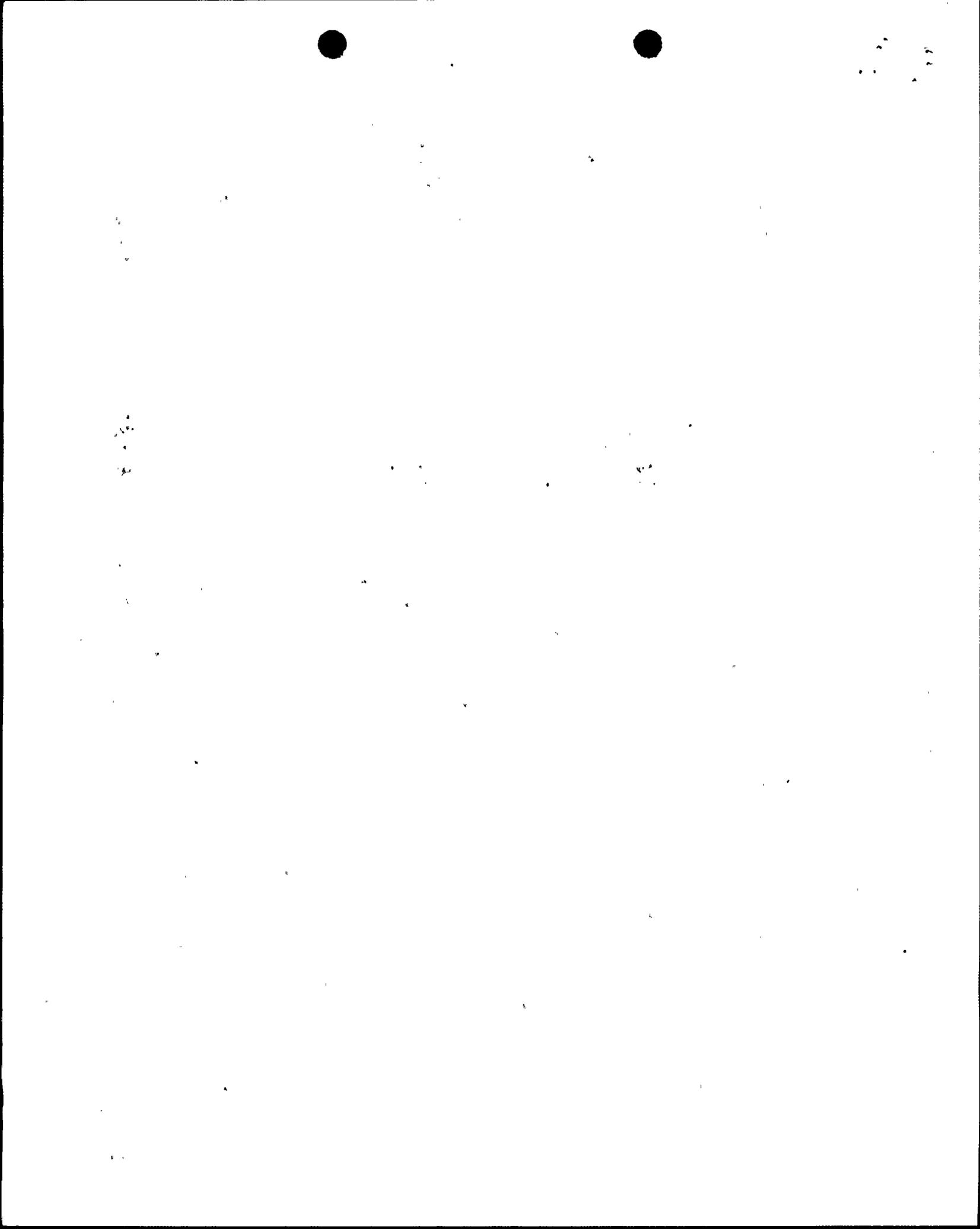
Justification for Exemption

The entire containment is classified as one fire area for each of Turkey Point Units 3 and 4. Each containment has an inside diameter of 116-feet and a free volume in excess of 1.5 million cubic feet. A primary shield wall encloses the reactor and forms the refueling cavity. There is also a secondary shield wall, a biological shield wall up to 3-feet in thickness, which encloses the primary loop.

By the nature of the arrangement of structures and equipment inside containment, it is not practical to meet the literal requirements for separation with no intervening combustibles. Instead, the routing of redundant safe-shutdown circuits, fire protection features, and the location and quantity of intervening combustibles have been evaluated and considered to provide substantial assurance that a fire inside containment will not prevent safe shutdown of the unit.

Raceway for redundant safe-shutdown circuits tend to radiate away from the reactor and follow the containment perimeter to their respective electrical penetration rooms. The routing is generally from opposite sectors of the containment such that redundant safe shutdown circuits are generally separated by much more than 20-feet. To the maximum extent possible cable is rerouted to achieve at least 20-feet clear separation.

The major combustible materials are lubricating oil and cables. Lubricating oil is contained in the Reactor Coolant Pumps, which are provided with oil collection systems; CRDM and Normal Containment Cooler Fan Motors; Emergency Containment Cooler Fan Motors; various motor-operated valves and snubbers; the Reactor Coolant Drain Tank Pump Motors; and the Containment Sump Pump Motors. The Reactor Coolant Pump Motors are located in separate cubicles and are fitted with oil collection assemblies to address Appendix R, Section III.0 requirements. The other oil sources include relatively small quantities of oil, are sparsely located and away from most safe-shutdown cable, and are not in close proximity to piping with temperatures higher than the oil flash point. Also, since personnel access to containment during plant operation is strictly controlled in accordance with site administrative procedures, the potential for significant quantities of transient combustibles to accumulate is reduced.



Fire protection features for these fire areas are both active and passive in nature. Passive fire protection is provided for the redundant equipment and instrumentation and their associated cables by physical separation and 1-hour rated protection. In addition, all the cables in cable trays are either coated with a fire retardant coating, Flamemastic 71A or 77, or qualified to the requirements of IEEE 383, 1974. The fire retardant coating, although not a rated fire barrier, acts as a radiant energy shield to provide a substantial level of protection against postulated exposure fires. Furthermore, the location of the trays at elevations ranging from 19'-5" to 80', outside of the secondary shield wall and the configuration of Containment Building itself precludes the possibility of cable damage due to stratification of hot gases or other products of combustion.

In the unlikely event of a fire in these areas, there are a number of available fire protection features which would serve to ensure the safe shutdown capability of the plant. Specifically, portable fire extinguishers are located inside containment and in the immediate vicinity of each personnel access hatch. Also, ionization type smoke detectors are installed in the electrical penetration areas. These smoke detectors, which alarm in the Control Room would ensure early detection of a fire and rapid response of the plant fire brigade.

Considering the above, it is FPL's position that strict application of Appendix R, Section III G.2.d requirement to the fire protection of redundant safe-shutdown cables inside containment is not necessary to achieve the underlying purpose of the rule, i.e., fire protection of safe shutdown capability. Accordingly, this exemption will not result in an undue risk to the health and safety of the public and is justified under the provisions of 10CFR50.12, Section (a)(2)(ii).

