October 3, 1991

Docket Nos. 50-277
and 50-278

Mr. George J. Beck
Manager-Licensing, MC 5-2A-5
Philadelphia Electric Company
Nuclear Group Headquarters
Correspondence Control Desk
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Wayne, Pennsylvania 19087-0195

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Dear Mr. Beck:

SUBJECT: EXEMPTION FROM THE REQUIREMENTS OF 10 CFR PART 50, APPENDIX R, PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 (TAC NOS. 65147 AND 65148)

In response to your letter dated December 10, 1986, the Commission has issued the enclosed Exemption for the Peach Bottom Atomic Power Station, Units 2 and 3, from the requirements of 10 CFR Part 50, Appendix R, Section III.G and Section III.M. It exempts Peach Bottom Units 2 and 3 from meeting the technical requirements of 10 CFR Part 50, Appendix R, Section III.G.2 for 3-hour rated fire barriers in three plant applications. It also exempts Peach Bottom Units 2 and 3 from meeting the technical requirements of 10 CFR Part 50, Appendix R, Section III.M fire barrier cable penetration qualification in two plant applications.

A copy of the exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/S/
Joseph W. Shea, Acting Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

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Enclosure:
Exemption

cc w/enclosure:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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Philadelphia Electric Company
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Office of Nuclear Reactor Regulation

Enclosure:
Exemption

cc w/enclosure:
See next page

Mr. George J. Beck
Philadelphia Electric Company

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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Annapolis, Maryland 21401

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
PHILADELPHIA ELECTRIC COMPANY	)	Docket Nos. 50-277
PUBLIC SERVICE ELECTRIC AND GAS COMPANY	)	and 50-278
DELMARVA POWER AND LIGHT COMPANY	)	
ATLANTIC CITY ELECTRIC COMPANY	)	
	)	
(Peach Bottom Atomic Power Station,	)	
Units 2 and 3)	)	

EXEMPTION

I.

The Philadelphia Electric Company, et. al. (the licensee), is the holder of Facility Operating License Nos. DPR-44 and DPR-56, which authorizes operation of the Peach Bottom Atomic Power Station, Units 2 and 3, at a power level not in excess of 3293 megawatts thermal each. The facilities are boiling water reactors located at the licensee's site in York County, Pennsylvania. The license provides, among other things, that the facilities are subject to all rules, regulations and orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

II.

On November 19, 1980, the Commission published a revised Section 10 CFR 50.48 and a new Appendix R to 10 CFR Part 50 regarding fire protection features of nuclear power plants (45 FR 76602). The revised 10 CFR 50.48 and Appendix R became effective on February 17, 1981; Section III of Appendix R contains 15 subsections lettered A through O, each of which specifies requirements for particular aspects of the fire protection features at a nuclear power

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facility. Two of the 15 subsections, III.G, and III.M are the subjects of the exemption.

By letter dated December 10, 1986, the licensee requested that the NRC staff review and concur with a Philadelphia Electric Company analysis of three fire barrier configurations that did not meet 10 CFR Part 50, Appendix R.

Section III.G.2 fire rating requirements. In that same letter, the licensee also requested that the NRC staff review and concur on a Philadelphia Electric Company analysis of two penetration seal configurations that did not meet 10 CFR Part 50, Appendix R, Section III.M penetration seal qualification requirements.

Section III.G.2 of Appendix R requires that one train of cables and equipment necessary to achieve and maintain safe shutdown be maintained free of fire damage by one of the following means:

1. Separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a 3-hour rating. Structural steel forming a part of or supporting such barriers shall be protected to provide fire resistance equivalent to that required of the barrier;
2. 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. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area; or
3. Enclosure of cable and equipment and associated non-safety circuits of one redundant train in a fire barrier

having a 1-hour rating. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area.

If these conditions are not met, Section III.G.3 requires an alternative shutdown capability independent of the fire area of concern. It also requires that a fire detection and fixed fire suppression system be installed in the fire area of concern. These alternative requirements are not deemed to be equivalent; however, they provide equivalent protection for those configurations in which they are accepted.

Section III.M of Appendix R requires that fire barrier cable penetration seal designs shall use only noncombustible materials and shall be qualified by tests that are comparable to the tests used to rate fire barriers. The acceptance criteria for such test shall include:

1. The cable fire barrier penetration seal has withstood the fire endurance test without passage of flame or ignition of cables on the unexposed side for a period of time equivalent to the fire resistance rating required of the barrier;
2. The temperature levels recorded for the unexposed side are analyzed and demonstrate that the maximum temperature is sufficiently below the cable insulation ignition temperature; and
3. The fire barrier penetration seal remains intact and does not allow projection of water beyond the unexposed surface during hose stream test.

The Commission may grant exemptions from the requirements of the regulations which, pursuant to 10 CFR 50.12(a), are: (1) authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) present special circumstances. Section 50.12(a)(2)(ii) of 10 CFR Part 50 indicates that special circumstances exist when application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.

1. TURBINE BUILDING, ELEVATION 135 FEET, EMERGENCY SWITCHGEAR AND BATTERY ROOMS (12 ROOMS)

1.1 Exemption Considered

The licensee presented an analysis which, if approved, would require an exemption from Section III.G.2.a to the extent that the wall separating the individual Emergency Switchgear and Battery Rooms from each other and from an access corridor and 2 duct chases are constructed of concrete block with a fire resistance rating of only 2 hours.

1.2 Discussion

The licensee provides (in Attachment 1 of licensee's letter dated December 10, 1986) that the maximum combustible loading in any of the Emergency Switchgear and Battery Rooms is 28,800 BTU/ft^2 with a corresponding equivalent fire severity of 19 minutes. The licensee contends that the 2-hour rated walls are sufficient to withstand a fire of this duration. In addition, an automatic smoke detection system is provided in each of the rooms which would trigger a rapid response by the Fire Brigade to any actual fire. Upgrading of the walls would require an encapsulation type of fire proof coating. The high cost involved due the number of penetrations and walls and difficulty of installation would not be offset by a significant increase in fire protection.

The licensee, therefore, contends that the purpose of the rule is achieved with the existing installation.

1.3 Evaluation

The technical requirements of Section III.G.2.a are not met because the concrete block walls of the Emergency Switchgear and Battery Rooms do not meet the 3-hour resistance rating.

The staff concurs with the licensee's technical analysis. The largest combustible loading of 28,800 BTU/ft^2 in any of the rooms has a corresponding fire severity of approximately 20 minutes. It is reasonably expected that a fire in one of these spaces would be quickly detected in the control room by an alarm of the installed smoke detectors. The prompt response of the fire brigade is expected to rapidly suppress the fire. The staff expects that even if a fire occurs that is not detected for an extended period of time, the installed fire barriers and low fuel loading would prevent the fire from spreading out of the room of origin.

Section III.G.2.a requires separation of redundant trains of safe shutdown equipment by fire barriers having a 3-hour rating in order to limit fire damage to systems required to achieve and maintain safe shutdown. The existing 2-hour rated walls are adequate to withstand a fire involving the maximum combustible loading of 28,800 BTU/ft^2 in any of the Emergency Switchgear and Battery Rooms. The installed fire protection configuration provides an equivalent level of protection as that required by Section III.G.2.a.

1.4 Conclusion

Based on our review of the licensee's proposal, the staff concludes that the installed fire protection configuration in the Emergency Switchgear and Battery Room is acceptable. Therefore, an exemption for the lack of 3-hour rated fire barriers in the Emergency Switchgear and Battery Room delineated in Attachment 1 to the December 10, 1986 letter to the staff should be approved.

2. TURBINE BUILDING, ELEVATION 135 FEET, ACCESS CORRIDOR BEHIND THE EMERGENCY SWITCHGEAR AND BATTERY ROOMS

2.1 Exemption Considered

The licensee presented an analysis which, if approved, would require an exemption from Section III.G.2.a to the extent that fire barriers between the access corridor on elevation 135 feet and 13KV switchgear area on elevation 116 feet consists in part of 2 duct chases in two 4KV Emergency Switchgear Rooms, penetration fire stops and fire dampers within ducting inside the chase. The fire dampers and penetration stops are in different planes and different elevations and this configuration requires an exemption since the intervening ducting does not meet the 3-hour resistance requirement of Section III.G.2.a.

2.2 Discussion

In Attachment 1 of the licensee's letter dated December 10, 1986, the licensee described the fire barrier configuration between the Access Corridor behind the Emergency Swithgear and Battery Room and the 13KV Switchgear area below. Two HVAC duct chases, which are actually located in two 4KV Emergency Switchgear Rooms, form part of the current fire boundary between the two areas described. The HVAC ducting within the chase contains fire dampers. The opening between the duct chase and the duct is sealed by a 3-hour rated penetration stop

located at the floor level. The issue necessitating the exemption is that the penetration seal and the fire dampers are in different planes and thus, do not meet the requirements of Section III.G.2.a. The largest combustible loading in any of the affected surrounding fire areas is estimated at 22,000 BTU/ft^2 with a corresponding equivalent fire severity of 14 minutes. The licensee contends that any fire in the 13KV area will be prevented from passing to the corridor by the penetration stops in the chase at the floor level and that combustion products that entered the actual ducting would be stopped at the corridor wall by the fire dampers. In addition, automatic smoke detection devices are provided for the areas in question. It is estimated by the licensee that the alarms and subsequent prompt response by the Fire Brigade would rapidly extinguish any actual fires. The licensee justifies the exemption based on the adequacy of the fire dampers and penetration seals, even though they are on different planes, and on the low combustible loading in any of the described areas and on the ability of the smoke detection system and fire brigade to quickly suppress actual fires.

2.3 Evaluation

The technical requirements of Section III.G.2.a are not met in that the configuration of rated fire dampers and penetration seals in different planes and the use of non-three-hour rated ducting between the planes does not meet the 3-hour resistance rating.

The staff essentially concurs with the licensee's analysis. It is expected that due to the low combustible loading in the described areas any fire that would develop would not be large enough to seriously challenge the combination of duct walls, fire stops, and fire dampers so as to cause them to fail and allow passage of fire. Should a fire occur that went undetected by

the smoke detection system, it would be prevented from spreading from one fire area to another by the installed configuration of barriers, dampers and penetration stops. No combustibles are located in either the ducts or the duct chases. It is expected that the installed smoke detection system would provide for a rapid response by the fire brigade. Installed fire fighting equipment, including fire hoses and portable extinguishers is adequate to fight any projected fire. Section III.G.2.a requires separation of redundant trains of safe shutdown equipment by fire barriers having a 3-hour rating in order to limit fire damage to systems required to achieve and maintain safe shutdown. The existing configuration of fire dampers, penetration fire stops and ducts combined with low combustible loading provides a level of protection equivalent to that required by Section III.G.2.a.

2.4 Conclusion

Based on our review of the licensee's proposal, the staff concludes that the fire barrier protection provided by the dampers and penetration stops in the ducting and chase is adequate. Therefore, an exemption from the requirements of Section III.G.2.a of Appendix R should be aproved.

3. RADWASTE BUILDING, ELEVATION 135 FEET, REMOTE SHUTDOWN PANEL AREA

3.1 Exemption Considered

The licensee presented an analysis which, if approved, would require an exemption from Section III.G.2.a of Appendix R to the extent that a 1/8" steel angle atop a 3-hour rated fire barrier between the Radwaste Centrifuge and Sample Tank Area (Fire Area 2) and the Remote Shutdown Panel Area circumvents the installed rated barrier.

3.2 Discussion

The separation between the Remote Shutdown Panel Area and the Radwaste and Centrifuge Area is a 3-hour rated fire barrier consisting of a reinforced concrete wall. The ceiling to the Radwaste Sample and Centrifuge Area is a 10-guage steel plate. The steel plate is fastened to the fire barrier by 10-guage steel angle brace. From a fire protection point of view, the steel angle tends to short circuit the protection provided by the wall. The licensee proposes that the geometry of the surrounding spaces and the low fire loading in those spaces allows for adequate fire protection.

Attachment II to licensee's letter of December 10, 1986, depicts the geometry of the spaces involved. The barrier between the Remote Shutdown Panel Area and the Radwaste Centrifuge and Sample Tank Area is a rated fire wall approximately 70 feet long. For a length of 32 feet, additional fire barrier protection is provided by the Centrifuge Area on the Fire Area 2 side of the barrier. The Centrifuge rooms are 22 feet deep and have 3-foot thick reinforced concrete ceilings below the 10-guage steel plate ceiling.

On the Remote Shutdown Panel side of the barrier, a walk-in metal plenum runs along the length of the barrier for 49 feet. The depth of the centrifuge rooms and the walk-in plenum serves as a buffer region between the two fire areas and the geometry of these two spaces leaves an approximately 20-foot length of the fire barrier in which the steel angle is exposed to fire on both sides.

The area above the Radwaste Centrifuge and Sample Tank Room, of which the 10-gauge steel plate forms the floor, serves as a fresh air ventilation plenum. There are no safety related or safe shutdown components located in the fresh air ventilation plenum.

With respect to combustible material, there is no combustible material in the ventilation plenum nor in the walk-in plenum. There are no cable penetrations through the steel angle nor through the steel wall including the area where it is adjacent to both fire areas. There is no combustible material in the immediate vicinity of the angle. The maximum combustible loading of the Remote Shutdown Panel Area is 54,775 BTU/ft^2 with a corresponding fire severity of 41 minutes. The maximum combustible loading in the Radwaste Centrifuge and Sample Tank Area is 10,440 BTU/ft^2 with a corresponding fire severity of 5 minutes.

The licensee projects that no postulated fire in any of the areas would cause flame penetration from one fire area to the other. In addition, it is expected that any fire that impacted on the steel angle that is exposed to both sides of the fire barrier would not cause ignition on the opposite side of the barrier due to overheating. Automatic smoke detection system and cable tray line type heat detectors are installed in the Remote Shutdown Panel Area.

3.3 Evaluation

The technical requirements of Section III.G.2.a are not met because the 1/8-inch steel angle atop the 3-hour rated fire barrier with possible exposure to fire on both sides, does not meet the 3-hour resistance rating.

The staff concurs with the licensee's analysis. The Centrifuge Rooms and walk-in plenums provide a significant barrier against ignition caused by conduction through the steel angle. In order for fire in one area to spread into the other areas, it would have to fail either the steel floor of the fresh air plenum or the angle brace connecting the plenum floor to the separating reinforced concrete wall. Neither of these possibilities is considered likely given the low fuel loading in each area, and the fact that no combustibles are located adjacent to the angle brace.

In addition, installed smoke detectors would provide warning of a projected fire in any of the areas under discussion. It is expected that prompt response by the fire brigade would provide rapid suppression of any fires. In the event that a fire went undetected for a period of time, the low combstible loading provides adequate margin against fire spreading across the fire boundaries. Section III.G.2.a requires separation of redundant trains of safe shutdown equipment by fire barriers having a 3-hour rating in order to limit fire damage to systems required to achieve and maintain safe shutdown. The existing 3-hour rated barriers and low combustible loading in the vicinity of the steel angle provide a level of protection equivalent to that required by Section III.G.2.a.

3.4 Conclusion

Based on our analysis of the licensee's existing fire barrier geometry and combustible loading, the staff concludes that fire barrier protection is adequate in the Remote Shutdown Panel area and the Radwaste Centrifuge and Sample Tank area. Therefore, an exemption from Section III.G.2.a of Appendix R should be approved.

4. STATION WIDE, INTERNAL CONDUIT SEALS

4.1 Exemption Considered

The licensee presented an analysis which, if approved, would require an exemption from Section III.M of Appendix R to the extent that the penetration seal configurations in approximately 1300 applications have not been tested for their ability to withstand a 3-hour fire.

4.2 Discussion

Fire barrier cable penetrations are required to be constructed of non-combustible material and are to be qualified by tests equivalent to those used to qualify the fire barrier itself. At Peach Bottom, in applications where

conduits penetrate fire barriers and where access into the conduit is possible at the barrier or on the side closest to the barrier, the conduits are sealed internally with a qualified 3-hour rated fire seal. In applications where access into the conduit is greater than 5-feet from both sides of the barrier, a 3-hour rated penetration seal is not used. If there is an open termination point in a space on either side of the barrier, a smoke and hot gas seal is provided. Where closed termination points exist, such as in a lighting panel, a closed junction box, etc., no seal is provided. In no case is there a direct path into any conduit in areas containing safe shutdown components.

The purpose of penetration seals is to interrupt the three mechanisms by which fire or combustion products can penetrate a fire barrier through an electrical conduit. Those three mechanisms are: (1) conduction of heat along the conduit walls, (2) direct passage of flame or burning gases through an open conduit, and (3) passage of smoke or other combustion products through an open conduit.

The licensee contends that the configuration in conduits without rated penetration seals can meet the criteria for fire exposure in the plant for the following reasons:

1. Heat conduction through the barrier is along conduit walls. With or without the internal seal, the thermal conductivity of the conduit wall remains the same.
2. The fact that the conduit is closed at the end prevents the direct entry of smoke and hot gases. Although there is a potential for some passage of smoke and hot gases in later stages of the fire, this is not expected to be

significant given the relatively small cross section of the path and the integrity of the end closures during the fire.

3. In addition to the protection provided by the expected integrity of the end closures during a fire, flame spread through the conduit via the cabling is not expected to occur either. Most cabling is IEEE-383 qualified except for an extremely small amount of instrument cabling. The combustibles (i.e. cabling) occupies a significant portion of the cross section of the conduit. As such, the initial availability of air for combustion is limited. As cabling at the end of the conduit burns, combustion products will decrease the availability of air and will limit the spread of flame through the conduit.

4.3 Evaluation

The technical requirements of Section III.M are not met in that conduits through fire barriers are not provided with qualified 3-hour rated penetration seals.

The staff concurs with the licensee's analysis. Section III.M requires fire barrier cable penetration seals use only noncombustible materials and be qualified by tests comparable to tests used to rate fire barriers in order to ensure a fire does not spread from one fire area to another via electrical conduits. The Peach Bottom conduit sealing program addresses all three mechanisms by which fire can penetrate a fire barrier through a cabling conduit. The program ensures that there are no open conduits in any areas containing safe shutdown equipment. Since all conduits are provided with (1) a

3-hour fire rated penetration seal, or (2) smoke and and hot gas seal, or (3) end closures such as lighting panels or closed junction boxes, reasonable assurance exists that the flame or burning gases will not be spread from one fire area to another via electrical conduits. In addition, any smoke that might migrate from one fire area to another through conduit openings will be so limited in quantity as to preclude concern to safe shutdown components. The Peach Bottom conduit sealing program adequately addresses the three mechanisms by which fire can penetrate a fire barrier via a cable penetration and therefore provides an equivalent level of protection as that required by Section III.M.

4.4 Conclusion

Based on our review of the licensee's proposal, the staff concludes that the electrical conduit penetration configuration at Peach Bottom is adequate to prevent the spread of fire across fire barriers via electrical conduits. Therefore, an exemption from the requirements of Section III.M should be approved.

5. EMERGENCY SWITCHGEAR ROOMS AND UNIT 2 MG SET ROOM, ELEVATION 135 FEET BUS DUCT PENETRATING ASSEMBLIES

5.1 Exemption Considered

The licensee presented an analysis which, if approved, would require an exemption from Section III.M to the extent that 17 normally energized 4KV bus ducts lack 3-three hour rated penetration seals.

5.2 Discussion

Seventeen normally energized bus ducts penetrate fire rated barriers on the 135-foot elevation of the turbine building. These penetrations are located in the Unit 2 MG Set Room, Room 206 and Emergency Switchgear Rooms 217, 226, 227, 231,

261, 263, 265 and 267 and Emergency Switchgear Corridor 262. Three of the bus ducts are 1'4" x 3'0" while the remaining 14 ducts are 1'4" x 2'2". The ducts are constructed of .0833" steel plate (Gage No. 14) and penetrate the fire barriers approximately 10'6" off the floor. Each duct penetration is sealed with a smoke-tight porcelain through-bushing to seal off the movement of air or ionized gases through the bus duct. There are no combustible materials located within the duct.

The combustible material in the affected spaces consists of IEEE-383 cable insulation. The MG Set Room has a combustible loading approximately 152,000 BTU/ft^2 with a fire severity of about 2 hours. The combustible loading in the other affected spaces ranges from 9000 BTU/ft^2 to 29,000 BTU/ft^2 with a corresponding fire severity range of seven to 22 minutes. The MG Set Room has 3-hour rated fire walls while the Emergency Switchgear Corridor has two hour and 3-hour rated fire walls and the Emergency Switchgear Rooms have 2-hour rated fire walls.

The licensee contends that the worst-case postulated fire in these spaces would be a cable spreading fire involving cable insulation. Such a fire would be slow to propagate and develop heat due to the inherent slow burning nature of the IEEE 383 qualified cable materials.

The Emergency Switchgear Rooms and Corridor have installed smoke detection with remote alarms in the control room.

The licensee contends that the combination of metal duct plating and porcelain barriers is sufficient to contain a fire to the room of origin. In addition, the licensee contends that early warning smoke detection system and the subsequent response of the fire brigade would be sufficient to minimize the

likelihood that a fire would penetrate the bus duct and adversely affect equipment in adjacent areas. Fire fighting equipment in the area consists of hose stations and portable fire extinguishers.

The MG Set Room is protected by a local automatic preaction sprinkler system. The sprinkler is actuated by an area smoke detection system. The combustible material in the MG Set Room consists of lubricating oil in the MG sets and cable insulation. The licensee contends that a fire in this area would be detected and controlled by the preaction sprinkler system. The licensee also contends that the combination of metal plate ducting and porcelain barriers, together with the early warning detection system and fire brigade response, would preclude the likelihood of a fire penetrating the bus ducts and exposing equipment in adjacent areas.

5.3 Evaluation

The technical requirements of Section III.M are not met in that the 4KV bus ducts do not have 3-hour rated fire penetration seals.

The staff concurs with the licensee's technical analysis. Section III.M requires that fire barrier cable penetration seals use only noncombustible materials and be qualified by tests comparable to tests used to rate fire barriers in order to ensure a fire does not spread from one fire area to another via electricl conduits. The fire barriers in the affected spaces are adequately rated for the combustible loading in those spaces. For the Emergency Switchgear Rooms and Corridor, the metal duct plate and porcelain barriers within the ducts are adequate to contain any postulated fires to the room of origin. The combination of ducting, fire barriers, automatic smoke detection and fire brigade response in the Emergency Switchgear Rooms and Corridor is adequate to prevent adverse exposure of equipment in adjacent spaces.

The combination of metal duct plating, porcelain barriers, automatic smoke detection and sprinklers and fire brigade response is adequate to prevent equipment in adjacent spaces from being adversely affected by a fire in the Unit 2 MG Set Room and therefore provides a level of protection equivalent to that required by Section III.M.

5.4 Conclusion

Based on our review of the licensee's proposal, the staff concludes that the fire protection configuration with regard to the 4KV duct penetrations in the Unit 2 MG Set Room, Emergency Switchgear Rooms 217, 226, 227, 231, 261, 263, 265 and 267 and Emergency Switchgear Corridor 262 is acceptable. Therefore, an exemption for the lack of 3-hour rated fire penetration seals in the above 4KV ducting should be approved.

III.

Accordingly, the Commision has determined that pursuant to 10 CFR 50.12(a), the exemptions described in Section II are authorized by law and will not present an undue risk to public health and safety, and are consistent with the common defense and security. The Commission further determines that special circumstances, as provided in 50.12(a)(2)(ii), are present for the exemptions in that application of the regulation in these particular circumstances is not necessary to achieve the underlying purposes of Appendix R to 10 CFR Part 50 because the licensee's alternate fire protection configuration provides a level of safety equivalent to that provided by compliance with Appendix R. Therefore, the Commission hereby grants the following exemption from the requirements of Section III.G and Section III.M of Appendix R to 10 CFR Part 50:

1. Lack of complete 3-hour rated fire barrier in the Turbine Building, Elevation 135 Feet, Emergency Switchgear and Battery Rooms (12 rooms) (License Exemption Part 1)
2. Lack of complete 3-hour rated fire barrier in the Turbine Building, Elevation 135 Feet, Access Corridor Behind the Emergency Switchgear and Battery Rooms (License Exemption Part 2)
3. Lack of complete 3-hour fire barrier in the Radwaste Building, Elevation 165 Feet, Remote Shutdown Panel Area (License Exemption Part 3)
4. Lack of qualified 3-hour penetration seals for conduit fire barrier penetrations where closed termination points exist or where smoke and hot gas seals are used in open termination conduits. (License Exemption Part 4)
5. Lack of 3-hour rated fire penetration seals in 4KV bus ducting in Unit 2 MG Set Room, Room 206, Emergency Switchgear Rooms 217, 226, 227, 231, 261, 263, 265 and 267 and Emergency Switchgear Corridor 262 of the Turbine Building. (License Exemption Part 5)

Pursuant to 10 CFR 51.32, the Commision has determined that the granting of this exemption will have no significant impact on the quality of the human environment (56 FR 50142).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION
original signed by
Steven A. Varga, Director
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 3rd day of October 1991.
*Previously Concurred

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1. Lack of complete 3-hour rated fire barrier in the Turbine Building, Elevation 135 Feet, Emergency Switchgear and Battery Rooms (12 rooms) (License Exemption Part 1)
2. Lack of complete 3-hour rated fire barrier in the Turbine Building, Elevation 135 Feet, Access Corridor Behind the Emergency Switchgear and Battery Rooms (License Exemption Part 2)
3. Lack of complete 3-hour fire barrier in the Radwaste Building, Elevation 165 Feet, Remote Shutdown Panel Area (License Exemption Part 3)
4. Lack of qualified 3-hour penetration seals for conduit fire barrier penetrations where closed termination points exist or where smoke and hot gas seals are used in open termination conduits. (License Exemption Part 4)
5. Lack of 3-hour rated fire penetration seals in 4KV bus ducting in Unit 2 MG Set Room, Room 206, Emergency Switchgear Rooms 217, 226, 227, 231, 261, 263, 265 and 267 and Emergency Switchgear Corridor 262 of the Turbine Building. (License Exemption Part 5)

Pursuant to 10 CFR 51.32, the Commision has determined that the granting of this exemption will have no significant impact on the quality of the human environment (56 FR 50142).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION
original signed by
Steven A. Varga, Director
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 3rd day of October 1991.
*Previously Concurred

OFC	:PDI-2/LA	:PDI-2/PM	:SPLB*	:OGC*	:PDI-2/D	:ADRI	:D/DRPE
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