

July 27, 1983

Docket Nos. 50-325  
and 50-324

Mr. E. E. Utley  
Executive Vice President  
Carolina Power & Light Company  
P. O. Box 1551  
Raleigh, North Carolina 27602

Dear Mr. Utley:

SUBJECT: EXEMPTION FROM REQUIREMENTS OF 10 CFR 50  
APPENDIX R, Section III.G.3

RE: BRUNSWICK STEAM ELECTRIC PLANT UNITS 1 AND 2

The Commission has issued the enclosed Exemption from the requirements of 10 CFR 50 Appendix R, Section III.G.3 with regard to fixed fire suppression in the seven fire zones in the Control Building Cable Vaults.

Your letter of May 2, 1983 requested resolution of nine exemption requests, withdrew 12 and requested deferral of 57 others. Seven of the nine requests to be resolved pertained to the Control Building Cable Vaults for which the enclosed exemption has been granted. Two of the nine requests to be resolved pertained to fixed fire suppression for each cable spreading room of the two Brunswick units. However, you have proposed to install a manually operated sprinkler system in the cable spreading room of each Brunswick unit. This type of fixed fire suppression meets the requirements of section III.G.3 and therefore, an exemption is not needed.

With regard to the deferral of 57 of your exemption requests, you stated that you were uncertain of the need for these exemptions pending the outcome of your Alternate Safe Shutdown Capability Analysis. Since requests for exemptions may be submitted under 10 CFR 50.12 as your analysis demonstrates a need for them, we find no basis for these requests to remain in a deferred state. Therefore, you are hereby notified that these 57 requests for exemptions, referred to in your letter of May 2, 1983, are denied.

In our letter of January 31, 1983 we stated that for denied exemptions involving alternative shutdown capability, you will be given six months to provide the description of the modifications for the alternative shutdown capability. In your letter of May 2, 1983 you stated that your Alternative Safe Shutdown Capability Analysis would require 12 months to complete and the analysis will be submitted by April 30, 1984. In a telephone conversation

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with your staff on June 14, 1983, we discussed means of achieving our mutual goal of installing additional fire protection measures as soon as practicable. Based on this discussion, we understand that you will begin modification of the Diesel Generator Building equipment hatches and the installation of fixed floor-mounted suppression systems in the Cable Spreading Rooms within six months. Furthermore, we understand that you will submit written quarterly progress reports on your alternative shutdown analysis and meet monthly with the NRC staff, as necessary, to demonstrate satisfactory progress in meeting NRC requirements. Your six-month progress report should provide a preliminary description of the modifications needed for alternative shutdown capability and an assessment of which of these modifications are sufficiently defined to begin implementation. You will then have an additional three months to complete the details of your study and submit your final report within nine months of receipt of this letter. By working closely with us, we expect that your final report will be acceptable to the staff and implementation of alternative shutdown capability will then begin immediately.

If you have any questions regarding this matter, please contact our Brunswick Project Manager, Sam MacKay.

Sincerely,

Original signed by/

Darrell G. Eisenhut, Director  
Division of Licensing

Enclosure:  
As stated

cc w/enclosure:  
See next page

DIST: DocketFile      NRC PDR      LPDR  
 ORB#2 Reading      DEisenhut      ORAB  
 SNorris      SMackay      OELD  
 EJordan      TBarnhart-4      ACRS-10  
 OPA, CMiles      NSIC      JTaylor  
 SECY      RDiggs      XTRA-5  
 Gray      T Wambach  
                  V Benaroya  
                  O Parr

OFFICE	ORB#2:DL	ORB#2:DL	ORB#2:DL	AD-OR:DL	D:DL	ORB#5:DL	OELD
SURNAME	SNorris/dn	SMackay	DVassallo	GLamas	DEisenhut	T.WAMBACH	W.Shields
DATE	7/18/83	7/19/83	7/21/83	7/21/83	7/21/83	7/21/83	7/25/83

Mr. E. E. Itley  
Carolina Power & Light Company  
Brunswick Steam Electric Plant, Units 1 and 2

cc:

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UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of )  
Carolina Power and Light Company ) Docket Nos. 50-325 and 50-324  
(Brunswick Steam Electric )  
Plant, Units 1 and 2) )

EXEMPTION

I.

Carolina Power and Light Company (the licensee) is the holder of Facility Operating License Nos. DPR-71 and DPR-62 which authorizes operation of the Brunswick Steam Electric Plant, Units 1 and 2, respectively (Brunswick or the facilities). These licenses provide, 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.

The facilities are boiling water reactors located at the licensee's site in Brunswick County, North Carolina.

II.

Section 50.48 of 10 CFR Part 50 requires that licensed operating reactors be subject to the requirements of Appendix R of 10 CFR Part 50. Appendix R contains certain specific requirements of fire protection programs at licensed nuclear facilities. On February 17, 1981, the fire protection rule for nuclear power plants, 10 CFR 50.48 and Appendix R, became effective. This rule required all licensees of plants licensed prior to January 1, 1979, to submit: (1) plans and schedules for meeting the applicable requirements of Appendix R, (2) a design description of any modifications proposed to provide

alternative safe shutdown capability pursuant to Paragraph III.G.3 of Appendix R, and (3) exemption requests for which the tolling provision of Section 50.48(c)(6) was to be invoked.

This Exemption relates to the requirements of paragraph III.G.3 of Appendix R as they apply to the Control Building Cable Vaults of Brunswick Units 1 and 2. Exemptions were requested by the licensee by letter dated May 2, 1983. Other pertinent supporting information had previously been supplied by letters dated June 30, 1982 and October 1, 1982.

The Control Building Cable Vaults consist of seven fire zones: CB-1b, CB-2a, CB-2b, CB-12a, CB-12b, CB-13a and CB-13b. The fire protection in these seven zones does not comply with the requirements of paragraph III.G.3 because a fixed fire suppression system has not been provided.

We have evaluated the other fire protection measures that exist in these zones as well as the fire potential of these zones. The ~~combustible~~ loading in the cable vaults consists of the polyvinyl chloride (PVC) jacketing on the conduits. The PVC is coated with a flame retardant coating, which is not a one-hour fire barrier, but will act to deter the ignition of the PVC, and if ignited will retard the rate at which the combustible jacket burns. The cable vaults are unventilated and separated from adjacent areas by complete three-hour rated fire barriers. If a fire occurs in one of the cable vaults, it is our opinion that the low fuel load and the added protection provided by the flame retardant coating in conjunction with the installed detection system will provide adequate time for the plant fire brigade to commence manual fire fighting activities before adjacent areas containing safety-related equipment are threatened. Because the

alternate shutdown capability that will be provided will be independent of these zones, the addition of fixed fire suppression systems will not significantly enhance fire protection safety.

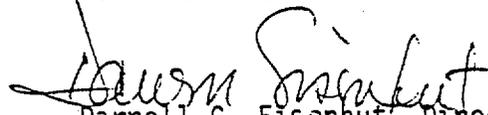
Based on our evaluation, we find that, since fixed fire suppression equipment in these zones will not significantly increase the level of fire protection, and existing fire protection, in conjunction with alternate shutdown capability for these zones, provides a level of fire protection equivalent to the technical requirements of Section III.G.3 of Appendix R, the exemptions should be granted.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, these exemptions are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest. The Commission hereby approves the requested exemptions from Appendix R of 10 CFR Part 50 paragraph III.G.3 with regard to the requirement for fixed fire suppression in the Control Building Cable Vaults, including fire zones CB-1b, CB-2a, CB-2b, CB-12a, CB-12b, CB-13a and CB-13b.

We have determined that the granting of this Exemption will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with this action.

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 27th day of July, 1983