

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of  
PUBLIC SERVICE ELECTRIC AND  
GAS COMPANY  
(SALEM GENERATING STATION,  
UNITS 1 AND 2)

}  
}  
} Docket Nos. 50-272/311  
}  
}

EXEMPTION AMENDMENT

I.

The Public Service Electric & Gas Company (the licensee) is the holder of Facility Operating License Nos. DPR-70 and DPR-75 which authorizes operation of the Salem Generating Station, Units 1 and 2, at a power level not in excess of 3411 megawatts thermal each. The facilities are pressurized water reactors located at the licensee's site in Salem County, New Jersey. The license provides, among other things, that the facilities are subject to all rules, regulations and orders of 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 10CFR Part 50 regarding fire protection features of nuclear power plants (45 FR 76602). In response to a fire protection exemption request by the licensee for Salem Units 1 and 2, dated July 15, 1988, the NRC granted, on July 20, 1989, an exemption from the requirements of Item III.G.2 of Appendix R to 10 CFR Part 50 for the Salem Units 1 and 2 containments (Exemption Request No. 12, Fire Areas 1-FA-RC-78 and 2-FA-RC-78). The containment subareas (within the above fire areas) housing the pressurizer and Panel 335, at elevation 100 feet, were exempted from the requirement

that redundant cables and equipment, within the above subareas, be separated either at least 20 feet of horizontal distance that is free of intervening combustibles or by a radiant energy shield. The exemption further stated that no additional fire protection modifications at the pressurizer were needed to enhance the currently existing level of fire safety in the containment and that the licensee would install, at Panel 335 for each unit, an automatic fire suppression system to enhance the fire protection for the panels which contain redundant channels of pressurizer pressure and level instrumentation. By submittal dated March 23, 1990, the licensee requested a correction to the totally automatic feature of the fire suppression system identified for Panel 335 in the NRC's approval letter. The licensee pointed out that their intent as identified in the exemption request of July 15, 1988 was to provide for a localized automatically actuated fire suppression system only if a gaseous type suppression system would be used. If, however, a localized water-based fire suppression system were to be used, it would require a remote manual action to open the normally closed containment fire suppression header isolation valve to actuate the system. In the March 23, 1990 letter, the licensee further stated that on review of the various fire suppression agents available, they had determined that a water-based fire suppression system would be the best choice for the Salem units and that they had consequently chosen a dry pipe sprinkler system. The licensee outlined the procedures for activating such a system. Additionally, the licensee

provided justification for eliminating the originally identified need (licensee's submittal dated July 15, 1988) for using fire detectors for the suppression system actuation. In a letter dated September 13, 1990, the licensee provided additional details concerning the alarms and air pressurization associated with the dry pipe sprinkler system. The Commission's staff evaluated the information provided by the licensee to support the exemption amendment. The Commission's Safety Evaluation relating to the use of a remote, manually actuated water fire suppression system and the elimination of fire detectors for fire suppression system actuation is being issued concurrently with this exemption amendment. The Safety Evaluation concludes that the use of a manually actuated, water based fire suppression system and smoke detectors is acceptable and does not invalidate NRC's earlier exemption approval.

### III.

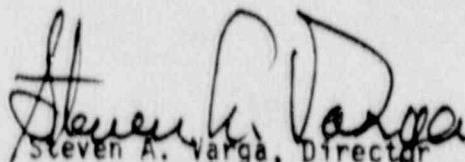
Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption amendment as described above is authorized by law and will not present an undue risk to the public health and safety, and is consistent with the common defense and security. The Commission further determines that special circumstances, as provided in 50.12(a)(2)(ii), are present for the exemption amendment in that application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of Appendix R to 10 CFR Part 50 because the licensee's alternate fire protection configuration, including the modifications that were proposed, provide a level of safety equivalent to that provided by compliance with Appendix R.

Therefore, the Commission hereby grants the exemption amendment from the requirements of 10 CFR Part 50, Appendix R, Section III.G.2.

Pursuant to 10 CFR 51.32 the Commission has determined that the granting of this exemption amendment will have no significant impact on the environment (55 FR 46877).

This exemption amendment is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Director  
Division of Reactor Projects I/II  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland  
this 14th day of November, 1990.