



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 7, 1994

Docket No. 50-286

Mr. William A. Josiger, Acting  
Executive Vice President - Nuclear Generation  
Power Authority of the State of New York  
123 Main Street  
White Plains, New York 10601

Dear Mr. Josiger:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT -  
EXEMPTION FROM THE REQUIREMENTS OF 10 CFR PART 50, APPENDIX R,  
SECTION III.G.2, FOR THE INDIAN POINT NUCLEAR GENERATING UNIT NO. 3  
(TAC NO. M88323)

Enclosed is a copy of an "Environmental Assessment and Finding of No Significant Impact" for your information. This assessment relates to the Power Authority of the State of New York's (PASNY's) application dated November 30, 1993, in which PASNY requested an exemption from the requirements of 10 CFR Part 50, Appendix R, Section III.G.2, which specifies requirements to ensure that one train of redundant equipment necessary to achieve and maintain hot shutdown remains free of fire damage.

During a programmatic review of Fire Protection Program and Appendix R compliance strategy at Indian Point Nuclear Generating Unit No. 3, PASNY identified that certain safe shutdown instrument sensing lines inside containment do not meet the separation requirements of Section III.G.2 of 10 CFR Part 50, Appendix R. Specifically, in some areas the wide-range steam generator water level and pressurizer level sensing lines are not separated by a horizontal distance of 20 feet, nor are they separated by a radiant energy shield. In addition, fire detection and suppression in the area is limited. The request for exemption from the requirements of 10 CFR Part 50, Appendix R, Section III.G.2, was limited to these sensing lines.

PASNY based its request for exemption on a determination that the low combustible loadings within containment, combined with the sensing lines' physical configurations and installation characteristics, ensure that at least one train of safe shutdown instrumentation will remain capable of performing its intended function during and after a postulated fire.

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Mr. William A. Josiger

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March 7, 1994

This notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,



Nicola F. Conicella, Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
Environmental Assessment

cc w/enclosure:  
See next page

Mr. William A. Josiger  
Power Authority of the State  
of New York

Indian Point Nuclear Generating  
Station Unit No. 3

cc:

Regional Administrator, Region I  
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Resident Inspector  
Indian Point 3 Nuclear Power Plant  
U.S. Nuclear Regulatory Commission  
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Assistant General Counsel  
Power Authority of the State  
of New York  
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Manager, Nuclear Safety and  
Licensing  
Consolidated Edison Company  
of New York, Inc.  
Broadway and Bleakley Avenues  
Buchanan, New York 10511

Mr. S. David Freeman, President  
and Chief Executive Officer  
Power Authority of the State  
of New York  
123 Main Street  
White Plains, New York 10601

Mayor, Village of Buchanan  
236 Tate Avenue  
Buchanan, New York 10511

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Resident Manager  
Indian Point 3 Nuclear Power Plant  
P.O. Box 215  
Buchanan, New York 10511

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Director Nuclear Licensing - PWR  
Power Authority of the State  
of New York  
123 Main Street  
White Plains, New York 10601

Union of Concerned Scientists  
Attn: Mr. Robert D. Pollard  
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Washington, DC 20036

Ms. Donna Ross  
New York State Energy Office  
2 Empire State Plaza  
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Albany, New York 12223

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120 Broadway  
New York, New York 10271

UNITED STATES NUCLEAR REGULATORY COMMISSION  
POWER AUTHORITY OF THE STATE OF NEW YORK  
DOCKET NO. 50-286  
ENVIRONMENTAL ASSESSMENT AND FINDING OF  
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of 10 CFR Part 50, Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior To January 1, 1979," Section III.G.2, to the Power Authority of the State of New York (the licensee) for the Indian Point Nuclear Generating Unit No. 3 (IP3), located at the licensee's site in Westchester County, New York.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

Section III.G.2 of 10 CFR Part 50, Appendix R, specifies measures to be taken to ensure that one train of redundant equipment necessary to achieve and maintain hot shutdown conditions remains free of fire damage.

During a programmatic review of IP3's Fire Protection Program and Appendix R compliance strategy, the licensee identified that safe shutdown instrument sensing lines inside containment do not meet the separation requirements of Section III.G.2 of 10 CFR Part 50, Appendix R. Specifically, in some areas the wide-range steam generator (SG) water level and pressurizer level sensing lines are not separated by a horizontal distance of 20 feet, nor are they separated by a radiant energy shield. In addition, fire detection and suppression in the area is limited. The licensee has, therefore,

requested exemption from the requirements of 10 CFR Part 50, Appendix R, Section III.G.2, for the wide-range SG water level and pressurizer level sensing lines within the IP3 containment structure.

Need for the Proposed Action:

The proposed exemption is needed to permit the licensee to operate the plant without being in violation of the Commission's regulations and to obviate the need for extensive modifications. Physical modification of the plant to achieve literal compliance with 10 CFR Part 50, Appendix R, Section III.G.2, would require many design changes, for example: rerouting portions of the sensing lines, installing additional barriers, and the installation of additional fire suppression and detection. Given the location of the sensing lines, the implementation of these changes would entail extensive scaffolding, as well as engineering and financial resources. In addition, since these modifications were not anticipated in the current outage scope, the detailed development and implementation of such design changes could significantly delay restart from the current outage, resulting in lost revenue.

Environmental Impacts of the Proposed Action:

Section III.G.2 of 10 CFR Part 50, Appendix R, requires that where redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area inside containment, fire protection must be provided by separation of cables and equipment by a horizontal distance of 20 feet, noncombustible radiant energy shields, or by installation of fire detectors and an automatic fire suppression system in the fire area. The licensee has determined that certain sections of the wide-range SG water level and pressurizer level sensing lines within containment do

not meet these requirements. Therefore, the licensee has requested an exemption from the requirements of 10 CFR Part 50, Appendix R, Section III.G.2, for these sensing lines within the containment.

The likely result of a fire affecting the sensing lines would be erroneous signals. The erroneous signals would not initiate until the fluid inside the lines is heated by the fire and would terminate after the fire was extinguished. The lines themselves would not experience fire damage.

The capability to safely shutdown the unit would not be jeopardized in the event that a fire results in erroneous wide-range SG water level or pressurizer level indications. Specifically, a fire inside containment would not necessitate control room evacuation (i.e., alternate shutdown), so operations personnel would have access to numerous and diverse plant status indications. In addition, plant operating procedures advise personnel that a fire may cause anomalous equipment behavior. Erroneous wide-range SG water level or pressurizer level indications resulting from a fire would be of short duration due to low combustion loadings inside containment. The fixed combustible loading in containment is very small and the locations of the redundant sensing lines are remote from fixed combustibles. The largest fixed combustible load, reactor coolant pump oil, is contained in a collection system in accordance with 10 CFR Part 50, Appendix R, Section III.O, and automatic smoke detectors are installed above each reactor coolant pump. Personnel access to the containment is restricted during power operation. As such, the potential for transient combustible materials to accumulate in the containment is very low. The containment is inspected by operations personnel prior to plant startup.

Based on the considerations discussed above, the Commission concludes that granting the proposed exemption will not increase the probability of an accident and will not result in any post-accident radiological releases significantly in excess of those previously determined for IP3. The proposed exemption would not otherwise affect radiological plant effluents, nor result in any significant occupational exposure. In addition, the exemption does not affect nonradiological plant effluents and has no other environmental impact.

Therefore, the Commission concludes that there are no significant radiological or nonradiological environmental impacts associated with the proposed exemption.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the Commission considered denial of the proposed action. Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar. The alternative would also result in unwarranted expenditures of engineering and financial resources, and could significantly delay restart from the current outage.

Alternate Use of Resources:

This action does not involve the use of any resources not previously considered in the "Final Environmental Statement for the Indian Point Nuclear Generating Station Unit No. 3," dated February 1975.

Agencies and Persons Consulted:

The Commission consulted with the State of New York regarding the environmental impact of the proposed action.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

Based upon the foregoing environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for exemption dated November 30, 1993. This document is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW, Washington, DC 20555, and at the White Plains Public Library, 100 Martine Avenue, White Plains, New York.

Dated at Rockville, Maryland, this 7th day of March 1994.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Capra, Director  
Project Directorate I-1  
Division of Reactor Projects I/II  
Office of Nuclear Reactor Regulation

Mr. William A. Josiger

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March 7, 1994

This notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by:

Nicola F. Conicella, Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
Environmental Assessment

cc w/enclosure:  
See next page

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\*See previous concurrence

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