



July 6, 1994
IPN-94-080

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, DC 20555


SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
**Additional Information Regarding
Exemption Request For Instrument Sensing Lines**

- Reference:
1. NRC letter, N. F. Conicella to W. A. Josiger (TAC No. M88323), dated May 25, 1994, "Request For Additional Information Concerning Exemption From The Requirement Of 10 CFR Part 50, Appendix R, Section III.G.2 - Indian Point Nuclear Generating Unit No. 3."
 2. NYPA letter, R. E. Beedle to NRC, dated November 30, 1994 (IPN-93-150), "Exemption Request Concerning Separation of Instrument Sensing Lines Inside Containment."

This letter transmits information requested (Reference 1) by the NRC regarding an exemption request (Reference 2) for the Indian Point 3 Nuclear Power Plant . The exemption requested concerned relief from the requirements of 10 CFR 50, Appendix R, Section III.G.2 for the wide range steam generator water level and pressurizer level sensing lines inside the containment building. The requested information is presented in attachment 1 to this letter.

If you have any questions, please contact Mr. P. Kokolakis.

Very truly yours,


W. A. Josiger
Acting Executive Vice President
Nuclear Generation

120028

Attachment: as described

cc: next page

9407130230 940706
PDR ADOCK 05000286
PDR PDR

ADOCK 11

cc: U.S. Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406

Mr. Nicola F. Conicella, Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
U.S. Nuclear Regulatory Commission
Mail Stop 14B2
Washington, DC 20555

Resident Inspector's Office
Indian Point Unit 3
U.S. Nuclear Regulatory Commission
P.O. Box 337
Buchanan, NY 10511

Attachment 1 to IPN-94-080

**Additional Information Regarding
Exemption Request For Instrument Sensing Lines**

NRC Request

Provide the maximum potential combustible loading summary for fire zone 70A (reactor coolant pump area). Include the basis used for the calculated fire severity for this area.

Response

The maximum potential combustible loading in fire zone 70A results in a fire severity of 0.79 hours. The combustibles included in the calculation are the lubricating oil for the Reactor Coolant Pump, incidental combustibles, transient combustibles, and electrical cable (assuming maximum acceptable fill of the trays). The combustible loading summary for fire zone 70A is as follows:

<u>Combustibles</u>	<u>Combustible Load (BTU)</u>
Exposed Electrical Cables:	106,241,890*
Combustible Fluids in System:	57,800,000
Incidental Fixed Combustibles:	1,342,800
Transient Combustibles:	<u>47,933,500</u>
Total Combustible Load	213,318,190
Floor Area (FT ²):	3,357
Fire Loading (BTU / FT ²):	63,544

Fire Severity (Fire Loading / 80,000 BTU/FT²/HR) = 0.79 hours

* This value for the exposed electrical cables is a conservative fire loading since it assumes a maximum acceptable design fill of the cable trays. Actual tray fill is less.

Some of the electrical cable fire load included in the combustible loading summary for fire zone 70A is located in the immediate vicinity of the pressurizer. The electrical cable trays in the immediate vicinity of the pressurizer and their associated fixed fire loadings are as follows:

<u>Cable Tray</u>	<u>Combustible Load (BTU)</u>
07Z1FD	12,472,416
08W1FD	1,795,272
08X1FD	661,416
08Y1FD	283,464
08Z1FD	330,708
09W1FD	1,889,760
09X1FD	283,464
09Y1FD	330,708

The combustible load calculation for each of the cable trays listed above conservatively assumes the maximum acceptable design fill of the cable trays. The cables in these trays are constructed of single conductor silicone rubber insulation, asbestos braid jacket.

Cable trays 08X1FD, 08Y1FD, 08Z1FD, 09X1FD, 09Y1FD form a ring around the pressurizer. Trays 09W1FD and 08W1FD traverse horizontally from the pressurizer ring to the shield wall and then drop vertically down the shield wall (parallel to the sensing lines) to tray 07Z1FD. Tray 07Z1FD runs horizontally along the shield wall away from the pressurizer and the instrument sensing lines.

The only other appreciable fixed combustibles in the vicinity of the pressurizer is the oil collection system for the Reactor Coolant Pump No. 34. This system was modified to meet the requirement of 10 CFR 50, Appendix R, Section III.O, which states: "The oil collection system shall be so designed, engineered and installed that failure would not lead to fire during normal or designed basis accident conditions and that there is reasonable assurance that the system will withstand the safe shutdown earthquake."