Stephen B. Bram
Vice President

Consolidated Edison Company of New York, Inc.
Indian Point Station
Broadway & Bleakley Avenue
Buchanan, NY 10511
Telephone (914) 737-8116

September 30, 1992

Re: Indian Point Unit No. 2
Docket No. 50-247

Document Control Desk
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555

SUBJECT: Response to NRC Bulletin No. 92-01, Supplement 1, "Failure of Thermo-Lag 330 Fire Barrier System to Perform its Specified Fire Endurance Function"

The Attachment to this letter contains our response to the subject NRC Bulletin, and is provided pursuant to Section 182a, Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f).

Should you have any questions regarding this matter, please contact Mr. Charles W. Jackson, Manager, Nuclear Safety and Licensing.

Very truly yours,

Subscribed and sworn to
before me this 30th day
of September, 1992.

Karen L. Lancaster
Notary Public
KAREN L. LANCASTER
Notary Public, State of New York
No. 60-4643659
Qualified In Westchester County
Term Expires 9/30/93

Attachment

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cc: Mr. Thomas T. Martin
Regional Administrator - Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Francis J. Williams, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop 14B-2
Washington, DC 20555

Senior Resident Inspector
US Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

ATTACHMENT

RESPONSE TO NRC BULLETIN 92-01, SUPPLEMENT 1

"Failure of Thermo-Lag 330 Fire Barrier System to Perform its Specified Fire Endurance Function"

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
SEPTEMBER, 1992

RESPONSE TO NRC BULLETIN 92-01, SUPPLEMENT 1

Requested Actions

All holders of operating licenses for nuclear power reactors, immediately upon receiving this bulletin, are requested to take the following actions:

1. For those plants that use either 1- or 3-hour pre-formed Thermo-Lag 330 panels and conduit shapes, identify the areas of the plant which have Thermo-Lag 330 fire barrier material installed and determine the plant areas which use this material for the protection and separation of the safe shutdown capability.

2. In those plant areas in which Thermo-Lag fire barriers are used in raceways, walls, ceilings, equipment enclosures, or other areas to protect cable trays, conduits, or separate redundant safe shutdown functions, the licensee should implement, in accordance with plant procedures, the appropriate compensatory measures, such as fire watches, consistent with those that would be implemented by either the plant technical specifications or the operating license for an inoperable fire barrier. These compensatory measures should remain in place until the licensee can declare the fire barriers operable on the basis of applicable tests which demonstrate successful 1- or 3-hour barrier performance.

Response

There are two areas of Indian Point Unit No. 2 which have Thermo-Lag 330 fire barrier material installed as pre-formed panels and conduit shapes and which protect components required for safe shutdown capability. These are:

- RHR Pump No. 22

  The RHR (residual heat removal) pumps are required to achieve and maintain cold shutdown conditions. There are two RHR pumps in separate fire areas. The power supply cables for RHR Pump No. 22 pass through the room housing RHR Pump No. 21 and are contained within a 5 inch diameter conduit. Thermo-Lag 330 pre-formed conduit shapes and trowel grade material provide a 3 hour fire barrier for the cables contained in the conduit.

- Alternate Safe Shutdown System (ASSS) Source Range Monitor and THot/TCold Indicators

  The source range monitor is required to monitor the achievement and maintenance of reactivity control. The reactor coolant system hot leg and cold leg temperature indicators are required to monitor the achievement and maintenance of hot and cold shutdown. Additional indicators for these parameters were

installed to meet the requirements of Appendix R. The instrument cables for these three ASSS instruments exit containment through penetration H20, enter an enclosure which consists of a 4 1/2 foot by 2 foot by 1 1/2 foot structural steel frame enclosed with Thermo-Lag 330 pre-formed panels, and exit the enclosure contained in a 3 inch diameter conduit that is protected with Thermo-lag 330 pre-formed conduit shapes. Trowel grade Thermo-lag material is also used in the installation. The complete assembly is a 3 hour rated fire area that is separate from the surrounding fire area that it is located within.

Both installations also have supporting steel protected with pre-formed conduit shapes, panels and/or trowel grade material to provide a 3-hour fire barrier. Further, to prevent thermal shorts all penetrations constituting a continuous path into the fire barriers are protected with pre-formed conduit shapes and/or trowel grade material. In the case of the conduit for RHR Pump No. 22, it shares two common supports with the conduit for RHR Pump No. 21 and the two conduits are in close proximity. This continuous path of conduit to support to conduit requires that a portion of the conduit for RHR Pump No. 21 be protected to provide proper protection for the RHR Pump No. 22 cables.

The original bulletin did not specify a size limit for small diameter conduit, did not address enclosures constructed with pre-formed panels, and did not report test failures of 3 hour rated material. Nevertheless, 4 hour fire watch tours in conjunction with existing fire detection instruments in each location were instituted in the RHR Pump No. 21 room and for the penetration enclosure on June 25, 1992 as conservative measures. As indicated in the bulletin supplement, since there are no applicable tests which demonstrate successful performance, the two barriers can not be declared operable. Therefore, in accordance with Staff guidance, a one hour fire watch tour using remote television surveillance has been instituted in both of the areas.

We are evaluating these fire barriers to determine if a replacement fire barrier material can be used or if the cable being protected can be routed in a manner to preclude the need for protection. Additionally, this issue is being addressed through an industry program being coordinated by the Nuclear Management and Resources Council. This program will include establishment of a test database, development of guidance for applicability of tests, development of generic installation guidance, and consideration and coordination of additional testing as appropriate. We will apply the results of these efforts, as applicable and when completed, to the Thermo-Lag installations within the scope of the bulletin.